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(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies :

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert, Russia)	=	2.69966	acres
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1 Peso, gold (100 centavos) (Argentina)	=	32.1137/64d.	at par
1 Peso, paper (Argentina)	=	15.875/64d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	183.015/64d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwis.
1 Rouble, gold (100 kopeks) (Russia)	=	22.1 $\frac{3}{4}$ d.	at par
1 Rupee (16 annas) (British India)	=	$\frac{1}{10}$ of £1 (gold)	
1 Talari (20 piastre) (Egypt)	=	42.1 $\frac{11}{32}$ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold 2 fun or 100 sen) (Japan)	=	25.037/64d.	at par
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(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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who have compiled them from the sources indicated.

PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown 100 heller (Austria-Hungary)	=	10 s.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{16}$ d.	at par
1 Deciatine (2 tchetwert; (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5/16 d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.733/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	933/64 d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	0.21998	gallons
1 Mark (100 Pfennige) (Germany)	=	0.0275	busbels
1 Mark (100 penni) (Finland)	=	11 3/4 d.	at par
1 Metre	=	933/64 d.	at par
1 Milreis, gold (Brazil)	=	3.28084	feet
1 Milreis, gold (Portugal)	=	25.261/64 d.	at par
1 Peseta, gold (100 céntimos) (Spain)	=	45.519/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	933/64 d.	at par
1 Peso, paper (Argentina)	=	32.1137/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	15.815/16 d.	at pa
1 Pund (Sweden)	=	185.015/64 d.	at par
1 Quinjal	=	0.93712	lbs.
1 Rouble, gold (100 kopeks) (Russia)	=	1.96843	cwt.
1 Rupee (16 annas) (British India)	=	28.1 3/64 d.	at par
1 Talari (20 piastre) (Egypt)	=	$\frac{1}{10}$ of £1 (gold)	
1 Verst (Russia)	=	45.111/32 d.	at par
1 Yen, gold 2 fun or 100 sen) (Japan)	=	1166.64479	yards
1 Zentner (Germany)	=	28.037/64 d.	at par
	=	110.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
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INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Co-operation and Association

REGENCY OF TUNIS.

AGRICULTURAL ASSOCIATION AND CO-OPERATION.

OFFICIAL SOURCES:

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In accordance with its rapid economic development, the Regency of Tunis has not been behind in taking its part in the movement for association and co-operation which is more and more affecting agriculturists

of all countries. At the present time, the most diverse forms of agricultural associations may be observed. Although the population of the Regency is made up of very distinct racial groups, these associations are, to a large extent, open to all, whether Europeans or natives. The Northern Chamber of Agriculture, and the Central and Southern Joint Chambers of Agriculture and Commerce are, however, confined to French citizens, and on the other hand three types of association are for natives only: the Consultative Chamber for Native Agricultural Interests of Northern Tunis, the native thrift societies, and the Co-operative Society of Native Horticulturists at Gabès. A complete account of agricultural association in Tunis will therefore be subdivided according to the purpose served by the associations, just as though we were dealing with one of the older countries with a homogeneous population. We shall thus study in succession:

1. Organizations representing or studying agricultural interests.
2. Co-operative associations for production, purchase and sale.
3. Credit organizations.
4. Mutual insurance societies.

§ I. ORGANIZATIONS FOR THE REPRESENTATION OR STUDY OF AGRICULTURAL INTERESTS.

These are divided under three heads:

- (a) Chambers of Agriculture.
- (b) The Consultative Chamber of Native Agricultural Interests of Northern Tunis.

(c) The Farmers' Society of Tunis.

- (a) *The Chambers of Agriculture.* — These are again three in number.

1. The Northern Chamber of Agriculture.
2. The Central Joint Chamber of Commerce and Agriculture.
3. The Southern Joint Chamber of Commerce and Agriculture.

The Northern Chamber of Agriculture was created by Decree of the Resident-General dated 19 November 1895.

It is composed of 18 members, elected on a block vote by administrative areas for a period of ten years, one third retiring every two years but being eligible for re-election. The electoral body is composed as follows:

1. French proprietors, or French persons enjoying the usufruct or use of a rural property (property worked with a view to the sale of the produce) or of forest lands, provided they have been in possession of the same for six months at least, whether resident in Tunis or not. When the rural property is the property of a company with unlimited liability, each member has the right of being inscribed on the electoral list. Companies in which there are members with unlimited liability and members with limited liability, and limited liability companies are represented on the electoral list by one deputy and have only one vote to dispose of apart from the technical staff engaged on the farm itself;

2. French agriculturists, stockbreeders, horticulturists, nursery-gardeners, gardeners and market-gardeners who have been established in Tunis for six months, whether as directors, managers, bailiffs or tenants (whether rent paying or profit sharing);

3. French foremen, including foremen in charge of viticulture and of crops generally, attached for a year at least to a farm;

4. Former French cultivators who have carried on their occupation for nine years at least in the administrative area of the Chamber, and who have remained in the Regency without taking up any other profession.

Since 1919 women have been placed on the electoral roll on the same conditions as men, but they are not eligible for election. Only male electors are eligible who have reached the age of 30 provided they are domiciled in Tunis, and are not officials.

The functions of the Chamber are to supply the Resident-General with advice and information as may be required by him on agricultural matters and interests, and to present to the administration its views on all matters relating to agriculture within its area.

The Central Joint Chamber of Agriculture and Commerce, created by decree of 23 November 1905 with headquarters at Soussa, and the Southern Joint Chamber of Commerce and Agriculture, created by decree of 20 February 1906 with headquarters at Sfax are each composed of 12 members, elected, as far as agricultural interests are concerned, under the same conditions as the members of the Northern Chamber of Agriculture.

This latter might be taken as the model in all respects. There is no question of any importance touching the agricultural community, which has not formed the subject of discussion in this assembly, and of resolutions. The successive Residents have for the most part given consideration to these resolutions, and have often been inspired by them in working out Tunisian legislation. We may add that the harmony and mutual understanding which prevail among the cultivators of Tunis in the defence of their vocational interests are attested by the fact that at each election the representatives of local associations of cultivators draw up a single list of candidates, and in 1920 a unanimity of votes might have been observed.

(b) *The Consultative Chamber of Native Agricultural Interests of Northern Tunis.* — On parallel lines to these French consultative Chambers, the Regency Government has lately decided to constitute native Chambers, and has made the first experiment with the rural populations of Northern Tunis, by instituting, by a decree of 13 March 1920, the Consultative Chamber of the Native Agricultural Interests of Northern Tunis, with headquarters at Tunis.

The Tunisian Government has adopted the principle of the discussion of native questions by an assembly composed solely of Tunisians, deliberating among themselves, in their own language, secured against irritating discussions, and gradually achieving in this way an education in citizenship under a French official, the Director of Native Economic Services, who acts rather as their counsellor and guide, than as their president.

To this plan the Government has not hesitated to add the elective principle.

The leading agriculturists of each sheikhat meet together and name a delegate for the sheikhat. These delegates elect in their turn among themselves four representatives for the caïdat. From that list the Resident-General chooses the representative of the caïdat. The electoral administrative area of the Chamber comprises 14 caïdats.

The delegates are nominated for six years and half the body is subject to re-election every three years. The Chamber, composed of the most competent agriculturists amongst the notables, will keep the Government informed as to the needs of the various classes of people, and, on the other hand, will give it the opportunity of consulting them on certain administrative departures. It is an application of the policy of close collaboration between the French administration and the indigenous population, which is the very essence of the Protectorate. We may add that if the experiment succeeds, it will be extended to the Centre and the South of the Regency, where the economic interests, though less concentrated than in the North, are not less important.

(c) *The Farmers' Society of Tunis.* — This society, which still remains to be mentioned is, so to speak, an offshoot of the Northern Chamber of Agriculture which decided on its formation in 1906 in concert with certain agriculturists. At first it bore the name of the Agricultural Association, and assumed the form of a co-operative society divided into two sections — a research section and a trading section. In 1912, the two sections were constituted as independent societies. The research section took the name of *Farmers' Society of Tunis*, and the trading section, of which we shall presently speak, that of the *Farmers' Central Co-operative Society*.

The Farmers' Society of Tunis continues the work of the former research section: creation and development of institutions for agricultural instruction, improvement of methods of cultivation, development of agricultural experimentation, and spread of agricultural information, and generally speaking the study and practice of all that can contribute to the economic and social progress of the Regency. It has its own budget, supported by an annual subvention, and by the contributions of members. A contribution of 10 francs a year entitles the subscriber to receive regularly the journal *L'Association*, the bulletin of the Society.

The numbers of members is at present over 600.

Every month there takes place, at the headquarters of the Society, a discussion meeting when the directors of the Society and other qualified persons treat of one or more subjects of immediate interest. These monthly meetings, which a large number of agriculturists attend regularly and with interest, have contributed largely to the spread of agricultural progress in the Regency.

The journal *L'Association* publishes a full account of these meetings, so that members who have not been able to be present are nevertheless kept acquainted with the work accomplished by the Society.

§ 2. CO-OPERATIVE SOCIETIES FOR PRODUCTION, PURCHASE AND SALE.

These comprise seven kinds of society:

- (a) The Central Farmers' Co-operative Society.
- (b) Local co-operative societies.
- (c) Irrigation associations.
- (d) Associations of proprietors of olive plantations.
- (e) The Co-operative Society of the Native Horticulturists of Gabès.
- (f) The native co-operative land-holding societies.
- (g) The Co-operative Motor-cultivation Society.

(a) *The Farmers' Co-operative Society.* — This Society, the second section of the former Agricultural Association, confines itself to its own rôle, the purely commercial one of buying and selling agricultural products and all materials and implements required in agriculture.

Its constitution is of the form of a co-operative society with a varying capital and limited liability as provided by the Decree of the Bey of 4 July 1907 relating to agricultural co-operative societies. By the terms of this decree, these societies can constitute themselves without governmental authorization. They have the character of commercial companies and as such are subject to the provisions of French law relating to these companies.

The Central Farmers' Co-operative Society is a corporate body and can sue and be sued. Its share capital, fixed at first at 25,000 francs in 500 shares of 50 francs has been increased on several occasions. On 31 December 1920 the number of shareholders was 1,255 and the share capital was therefore 62,750 francs. Every member must hold at least two shares and his liability is equal to three times the amount of the shares subscribed.

The total value of goods supplied to members was as follows in each year from 1913 to 1920:

1913	793,294.05 francs
1914	408,012.85 "
1915	472,348.65 "
1916	1,020,337.20 "
1917	817,599.15 "
1918	1,889,092.17 "
1919	1,492,456.11 "
1920	2,982,705.30 "

Total . . . 9,906,345.48 francs

In order to facilitate these operations, the members pledged themselves, at the last general meeting, to entrust at least the half of their orders to the Co-operative Society.

The payments effected by the Co-operative Society to commercial people are arranged through the medium of the Bank of Tunis, which has received on deposit the share capital of the association and which opens a credit for the association equal to the total liability of the members, every

opening of credit having to be covered within six weeks by bills accepted by the members. This organization permits of co-operators being given similar credit to that which would be given in ordinary trade.

During the War, the Co-operative Society organized loans in favour of its members, thus supplementing the regional agricultural credit bank, of which we shall presently speak, which had suspended its ordinary operations. From 1914 to the end of 1920, the following loans were granted:

Loans for seed corn	4,304,441.65	francs
» » labour	1,225,248.35	»
» » spring cultivation	556,483.75	»
» » harvest	1,599,609.50	»
» » fertilizers	423,822.95	»
» » tractors	1,061,102.85	»
Total	9,200,709.05	francs

Repayment of these loans has been effected under excellent conditions, and on 31 December 1920 there was only outstanding 378,063.45 francs of which:

14,430.05	francs was in respect of loans granted in	1915
13,795.75	» » » » » » » »	1916
966.10	» » » » » » » »	1917
3,407.00	» » » » » » » »	1918
39,956.15	» » » » » » » »	1919
305,544.40	» » » » » » » »	1920

We may add that during the same period the Co-operative Society acted as intermediary for its members for sale of their produce, and notably for the delivery of cereals against commissariat orders. It has thus rendered real service to members at a distance from centres.

(b) *Local Co-operative Societies.* — The local co-operative societies are intended to collect the orders of a locality, bulk them and transmit them to the Central Co-operative Society and guarantee payment for them. The local co-operative societies can also specialize in the sale or the working up of agricultural products, and can even carry out enterprises of general utility. It is in this way that the co-operative societies of Beja and of Munchar have imported from France mares for the production of mules with an arrangement for payment in two years' time by farmers. At Bir M'Cherga a co-operative bakery is at work. At Oued Ramel, the joint guarantee of the co-operative society has made it possible to instal a telephone. At Souk el Khemis a ginnery has been established, and so on.

(c) *Irrigation Associations.* — Irrigation and drainage, vital questions for Tunis, had already claimed the attention of the Romans. A sky and a soil equally poor in water, *coelo terraque penuria aquarum*, as Salust has it. They had observed that the torrential and intermittent rains

that are a feature of the country disintegrate the soil to a considerable depth, and perpetually alter its levels.

As remedy for this state of things, they employed methods varying according to the topography of the locality. In the low lying lands where the slopes are less steep, they collected the water in closely mortared basins with smooth edges. While held there the water deposited the earth brought down by it and held in suspense: then it escaped by means of a decanting pipe.

In country with a steeper slope, they employed the device of dams roughly made of unmortared stones, forming containing terraces succeeding each other at different levels from top to bottom: thus the force of the water was broken; and the erosion was reduced. The water was spread over large areas which absorbed it, thus feeding numerous springs. When it finally reached the plain, it was met by dams and sluices and conducted into irrigation canals and its full value for fertilizing the soil employed. Remains of these works are still to be seen at Djebel-Oust; the same procedure is adopted in our own time by the *Matmata*.

The Romans attached a capital importance to the regulation of water supply. It was for this reason that they took up positions near springs, at Vacca (Béjà), Sicca Veneria (Le Keff), Capsa (Gafsa), etc., dug wells and cisterns, collected the waters and constructed aqueducts.

The Decree issued by the command of the Bey dated 15 September 1897 on the subject of the expenditure on drainage and irrigation established the principle of subventions to associations formed among interested proprietors. This decree has been recently replaced by Articles 38 to 67 of the Decree of 25 May 1920, bearing directly on the conservation and utilization of the waters of the public land. In the terms of this decree, the proprietors interested in drainage and irrigation works are permitted, on the initiative either of one of themselves or of the Director General of Public Works, to form themselves into special associations, with the following aims:

1. To take measures against the overflow of water from temporary or permanent streams and, in general, against damage from water.
2. To clean out, deepen, embank and regulate temporary or permanent streams.
3. To dry, to render healthy, to remove the salt from, and to drain wet and insalubrious lands.
4. To fill up and raise the level of marshy land.
5. Irrigation with the waters of public lands granted for the purpose.

The Association can be formed if at the preliminary general meeting the following majorities are obtained:

1. A simple numerical majority of the interested persons representing the fourth part of the value of the land in favour of measures for preventing overflow and damage from water.
2. In all other cases support must be given either by one third of the persons interested representing the half of the whole area, or by half of those interested representing one third of the area.

Persons duly summoned who neither attend nor are represented at the general meeting are regarded as in favour.

Further if the initiative for the formation of the association has been taken by the Director General of Public Works and is based on grounds of hygiene, salubrity, public interest or order, the Chief Minister of the Regency has power to order the formation of an association, whatever may be the result of the general meeting.

The sole right of those in the minority, when it is a question of restoring land to a dry and healthy condition, of removing salt, of drainage, of raising levels or filling up, is to give up in return for an indemnity lands belonging to them within the area of the association.

When the association is constituted the obligations arising from its formation attach to the land and continue to be so attached, into whatever hands it may pass, up to the dissolution of the association. The charges or contributions payable by the members are recoverable in the same manner as communal charges, and for their recovery the association has a right to levy distress upon the profits, rents, crops and produce of any kind of the land subject to the charge. This right to distrain ranks immediately after that of the Treasury.

The Director General of Public Works exercises technical control over all works of construction and repair. In case of urgency, when a preliminary serving of notice remains without effect, he can order the execution of the operations and can take all measures necessary for the keeping in repair of engineering works. On the other hand in the default of an association to undertake the works in view of which it has been formed, the Chief Minister, on the proposal of the Director General of Public Works, has power, after the serving of notice remains without effect, to give official orders for the execution of the said work at the cost of the association. In the same way, when the intermission of or the failure to keep in order works undertaken may have consequences disastrous to the public interest, the Director General of Public Works may, after preliminary serving of notice, cause official procedure to be taken for the execution of work necessary to obviate these consequences.

As counterbalance to these obligations, the irrigation associations enjoy marked advantages.

In the first place, the Director General of Public Works is authorized to lend them, on consideration of a payment fixed by decree, expert assistance from his staff for the preparation of schemes, construction and repair of works. He is further authorized to make the association, within the limits of the credits provided for by the budget, an advance of the whole or part of the expenses of construction or of the heavy repairs of works approved by him. These advances are repayable to the State without interest, in a period not exceeding 25 years. Finally with the consent of the Director General of Finances and after ratification by the Council of Ministers, he has power to grant subventions to associations within the limit of the credits assigned for the purpose in the State budget.

sociations for irrigation from artesian wells, for irrigation by torrential waters and for irrigation from springs and constantly flowing streams. The following table gives information of each of the associations in active existence on 31 December 1920.

TABLE I. — *Position of the Irrigation Associations on 31 December 1920.*

Name of Association	Date of foundation	Number of members	Expenditure in 1920 francs	Receipts in 1920 francs	Reserves francs
<i>A. — Associations for irrigation from artesian wells.</i>					
Métoula (Gabès)	1918	171	338.00	338.00	—
Afu-Zerigue (Gabès)	1903	10	955.00	955.00	—
Ghennouch (Gabès)	1904	114	247.50	247.50	—
Bou-Chemina (Gabès)	1905	56	505.45	505.45	—
Zarzis Wells No. 1.	1913	101	2,552.46	2,552.46	—
Zarzis Wells No. 2.	1917	254	1,695.09	1,695.09	—
<i>B. — Associations for irrigation by torrential water.</i>					
Oued-Zeroud (Kairouan)	1906	198	15,100.00	18,000.00	2,500.00
Oued-Merquellil (Kairouan)	1909	232	18,000.00	18,000.00	1,600.00
Oued-Guergour (Thala)	1906 (1)	176	1,075.34	2,443.85	1,368.51
<i>C. — Associations for irrigation by springs or constantly flowing streams.</i>					
Sbiba (Thala)	1901 (2)	263	1,971.85	2,055.67	5,238.84
Nefta (Tozeur)	1912	1,100	8,062.35	8,062.35	20,000.00
Tozeur	1913	900	16,150.00	16,550.00	11,270.00
Rohia (Maktar)	1907 (3)	14	1,280.00	1,280.00	—
Gabès	1919	3,280	18,500.00	18,500.00	—
Thala	1920	45	1,568.80	1,568.80	—

(1) The figures for 1920 not being available, we give those of 1919. We may note that 1920 marks a fresh progress, the association numbering 206 members.

(2) Figures of 1919.

(3) Figures of 1919.

This table which does not include the Association for Irrigation from Artesian Water at Oudref (Gabès), founded in 1899, but suspended since 1913, gives us fifteen irrigation associations with 7,014 members. Their receipts in 1920 were 92,754.17 francs as against an expenditure of 88,301.84 francs, and they had accumulated reserves amounting to 43,077.35 francs. The figures relating to associations for irrigation from artesian wells where only small upkeep charges have to be met are relatively insignificant; on the other hand, the expenditure of the other associations

include works for regulation of weirs and for canalization, hence the much higher proportion of charges per member.

(d) *The Associations of Proprietors of Olive Plantations.* — With a view of assuring the operations relating to the care of olive plantations, their preservation, their management or the sale of their produce, a Decree of 23 October 1916 created associations consisting of proprietors and other persons having by any kind of title the use or the management of olive plantations.

These associations are administered by committees composed of proprietors of olive plantations who have become members under conditions laid down in the regulations peculiar to each association. Each committee is authorized to propose to the Chief Minister for sanction the measures to be taken in the area of the association with a view to regulating the general arrangements for policing the plantations, pasturage, the gathering of the olives, transport, purchase and sale of the olives during the period of the harvest and the rate at which each proprietor or occupier of olive plantations must contribute in proportion to the amount of the tax on olive trees which he pays. In addition a council for the supervision and improvement of these associations has its seat at Tunis.

The Decree of the Chief Minister dated 24 October 1916, regulating the associations of proprietors of olive plantations in the administrative area of Soussa enables us to form an idea of the working of the institution.

The number of members composing the local committees is proportional to that of the proprietors and to the importance of the plantations, but cannot be less than six or more than twelve. The names of the members of these committees are put forward by the notables belonging to the association, but the nominations are made by the Chief Minister on the proposal of the Caïd.

Sworn rangers, called "*amines de la Ghaba*," are nominated by decree on the proposal of the Caïd, from a list of three names presented by the local committee. They are present at meetings and take part in discussions but have no right to vote. A secretary and book-keeper, chosen as far as possible from among the lawyers of the place where the association has its headquarters, is presented by the committee for the approval of the Caïd, who acts in relation to it as the representative of the Government.

The committee meets twice a year at least, in May and in September, under the presidency of the Khalif or of the Sheikh. Its duties are:

1. To draw up the list of candidates for the office of "*amine de la Ghaba*,"
2. To present the names of permanent rangers for nomination by the Caïd;
3. To appoint temporary watchmen, to fix their number, and the period during which they shall be employed;
4. To fix the remuneration of these agents as well as that of the secretary book-keeper;

5. To investigate and to suggest to members measures for the conservation of olive trees, the increase of their yield, the improvement of cultivation, collective subscription for irrigation, etc. When the meeting is occupied with questions of this kind, an agricultural expert is always present as well as an official of the Native Economic Department.

The "amine de la Ghaba" is charged with the oversight of the plantations: he takes cognisance of delinquencies or contraventions and makes a deposition which he addresses to the Caïd to be passed on to a competent court. He may be assisted by one or more permanent rangers chosen by himself, approved by the local committee and nominated by the Caïd: moreover for the period of harvest, when special watching is required, he is assisted by temporary watchmen appointed on his proposal by the local committee, which fixes their number in accordance with the importance of the plantations and that of the crop.

In conformity with established usage, the temporary watchmen are collectively liable, during the period in which watching of the crop is necessary, to make good all thefts and damage committed within the sector of olive plantations of which they are in charge. Their liability is, however, discharged by the arrest of the offender, nor are they liable when the damage is caused by a "force majeure", hail, wind, lightning, locusts, etc.

The grazing of camels, cattle, sheep, goats, and pigs is forbidden at any time of the year on the lands planted with olive trees, on the so-called "meskat" lands, or on roads crossing olive plantations and "meskats". Camels and oxen employed for draught purposes or for ploughing are, however, allowed on such land but when at rest they must be tethered or hobbled; camels must also be muzzled.

There are however two exceptions in the case of cattle and sheep:

1. Each family may graze five sheep or ewes and five oxen or cows in the olive plantations belonging to it or occupied by it on any title, on condition that it is made impossible for these animals to penetrate into the neighbouring olive plantations either by a fence or by some other means.

2. In case of prolonged drought and absolute necessity, the owners of sheep can obtain individual permission from the Caïd to graze their beasts in the "meskats" belonging to them or of which they have the use.

With respect to the gathering of the olives, it is forbidden to make use of flails or sticks: it must be done by hand, and the pickers must be provided with ladders enabling them to reach and to pick the fruit that are otherwise out of reach. At the same time, on account of the great size of some olive trees, the use of a flexible switch not more than a metre in length is allowed for the gathering of fruit which is inaccessible by the means indicated.

On 31 December 1920 all the proprietors of olive plantations of the areas of Soussa, Monastir and Madhia were distributed between 47 local committees. The aggregate receipts of these associations amounted

to 151,469.45 francs and their aggregate expenditure to 145,064.70 francs. Their reserve funds amounted to 85,571.91 francs.

(e) *The Native Co-operative Horticultural Society of Gabès*. — This Association, created by Decree of 22 March 1911 contained at that date 328 members. On 31 December 1919 it numbered 1,060. Its aims according to its rules are:

1. The purchase in common of the fertilizers necessary for the enrichment of the soil of the oases, with a special view to the production of tobacco;
2. The improvement of fruit-growing and market-gardening, and the development of intensive cultivation;
3. The joint sale and shipping of the produce of the members;
4. The execution of agricultural undertakings of collective interest, with the proviso that the demand is put forward by two-thirds at least of the members.

By means of its gardening expert and by its *Bulletin*, the Association has familiarized the native population with better methods of cultivation. It has distributed free, on different occasions, grafts, seeds and prizes. In virtue of a Decree of 1 September 1920, it was transformed into the Syndical Association of Proprietors of the Oasis of Gabès.

(f) *Native Co-operative Land-holding Societies*. — The Agricultural Society (*Comice*) of Setif (Algeria) tried an experiment in native co-operative land-holding societies after the war, which deserves special mention. It rented 200 hectares of communal land, installed eight native families to work it themselves, and provided them with seeds, live stock, carts and advances in cash. At threshing time after deduction of the seed advances, 40 % of the crop is set aside for the repayment of the value of the stock. The experiment has been made on two pieces of communal land each of 100 hectares, one at Bizerta, the other at Ouled Sabeur. Each co-operative land-holding society consists of four families, and the Agricultural Society has furnished each group with two carts with teams of four oxen and two mules.

The Society is of opinion that a similar plan might be tried to settle the indigenous population on the public lands, but in order to ensure success, it is essential that it should be under the practical and disinterested direction of colonists, such as those of Setif (1).

(g) *Co-operative Motor-cultivation Society*. — Lastly in 1920 a Co-operative Motor-cultivation Society has been constituted with the aim of facilitating the acquisition of agricultural machinery by farmers. This benefits by State advances through the medium of the Regional Credit Bank, mentioned above. In this country of large holdings, motor-culti-

(1) The co-operative cultivation of land has also arisen spontaneously amongst the natives, being met with in the farming of certain public lands, such as those of the caldat of Souassi. These lands are fertile, and each person enjoying common rights brings his own yoke of oxen and does his own sowing. The harvest is gathered in common and shared between each family. All operations are carried on under the oversight of the notables.

vation has a great future, and the Motor-cultivation Congress of Tunis, in the Spring of 1921, was a striking manifestation of the progress already achieved along these lines (1).

§ 3. ORGANIZATIONS FOR THE PROVISION OF CREDIT.

*Co-operative agricultural credit in Tunis assumes two distinct forms; co-operative agricultural credit properly so-called, French or native; and the thrift societies specially designed for natives.

(a) *Co-operative Agricultural Credit*. — This came into being in 1905, under circumstances of some interest.

For a considerable time the farmers had been suffering from the impossibility of finding money, even at a high rate of interest such as 3 % per month, for their various ordinary operations. The want of money interfering in this way with the purchase of stock, of seeds, of manure, of agricultural machinery, they kept losing the chance of profitable undertakings of all sorts. The Tébourba Farmers' Association was the first to make a study of the question of rural co-operative credit banks and undertook a propagandist campaign in favour of setting up such banks. The Chamber of Agriculture took the matter in hand, and approached the Government with a view to obtaining for Tunis an adaptation of the French legislation on agricultural credit.

Those interested did not wait for the Government to mature its plan. One market-day, at Beja, some one was bemoaning the impossibility of finding the 300 or 400 francs necessary for ensuring proper preparation for the cultivation of the coming season, when some farmers, meeting in a café, undertook by a sealed deed to hold themselves jointly and severally liable for a sum of 30,000 francs intended to furnish small loans to those among themselves who might need such assistance. The next day the joint and several undertaking of the cultivators was successful in gaining the recognition of the banks.

The same precedent was established at Ain-el-Asker. Though with scanty pecuniary resources, the farmers were rich in honesty, courage and technical knowledge, and the need for the enterprise was soon demonstrated by the number of applications for loans from the commencement (30,000 francs at Beja, and 24,000 at Ain-el-Asker) and the possibility of its continued existence ensured by repayments regularly effected as they became due.

(1) New associations are being formed or are under consideration. Among the first are the Gardeners' Associations of Soliman and of Mactar, and the Native Co-operative Association of Téboursouk which aims at market-gardening and fruit cultivation and the planning and carrying out of works for the irrigation of the olive plantations of Téboursouk. Among the second are the Syndical Association of the Proprietors of the Island of Djerba, which will include all the landowners of the island, the Gardeners' Association of Hammam-Soussa, and the Olive-growers' Committee of Cape-Bon.

The cause was won both in the eyes of the public and in those of the Government, and on 25 May 1905, a Decree was issued on mutual credit in the Regency of Tunis.

The agricultural credit banks, regional and local, were declared to be on a commercial footing and were corporate bodies. Profiting by an agreement made with the Bank of Algeria at the time of the installation of that bank in Tunis, the State made advances without interest to rural banks. The amount of these advances was fixed at 500,000 francs, plus the whole of the annual payment which the Bank of Algeria had to make. The State fixed the maximum of the advances which could be made to the regional banks at four times their share capital. As these advances were made without interest it was possible to keep the rate of discount low, while at the same time covering the expenses of the bank and building up reserves from the beginning.

For this reason, as soon as the Decree was promulgated, the farmers decided on the creation of the Regional Co-operative Agricultural Credit Bank of Northern Tunis. Its foundation capital soon amounted to 40,000 francs fully paid up and the Government, in execution of Article 16 of the Decree, added to it a sum of 160,000 francs. Fourteen local banks were organized in different localities. In 1913, the year before the war, there were affiliated to this regional bank 51 banks, 24 French with 556 members and 27 native with 849 members; on 31 December 1920, there were 75 affiliated banks, 37 French with 668 members and 38 native with 1,429 members.

These banks are worked on a very simple plan. The local banks, absolutely independent, each with its own capital, endorse the bills of their members, and forward them to the Regional Bank. This discounts the bills of the local bank, a credit proportionate to its capital being opened in favour of each.

In fact, the operations of the Regional Bank are carried through by a credit organization, the Algerian Company, where its funds are deposited. This bank discounts all the bills presented to it with the signatures of the borrower, of the local bank concerned, and of the regional bank. The task of this last is thereby simplified, and it has on the other hand obtained from the Algerian Company the opening of a discount credit equal to four times its deposit: this deposit is made up of its own subscribed capital, augmented by an advance from the State equal to four times this capital. It thus finally has the disposal of a credit twenty times that of the sum paid up by its members.

In 1920, 459 bills totalling 2,355,656.60 francs were discounted.

Co-operative agricultural credit tends to assume a new importance and to increase the number of its operations on account of the lower purchasing power of money, of the restriction of banking credit, and of the requirements of business in which long credit can no longer be given. In fact as a consequence of the difficulties experienced by a large number of farmers in procuring funds in credit institutions, the idea is gaining ground that the local agricultural credit banks affiliated to the Regional

Bank and subsidized by the Government ought to become the sole bankers of the farmer. If this end is to be achieved, it is quite clear that the local banks cannot limit the credit of their members to pre-war figures, which were usually fixed at 3,000, 4,000 or 5,000 francs. A more considerable credit must be contemplated comprising:

1. A seasonal credit giving the right to advances in money realizable in instalments during the course of the agricultural year:

2. A purchasing credit, for the purpose of paying cash for the supplies necessary to agricultural undertakings (machinery, petrol, motor-spirit, oil, twine, superphosphates, etc.).

As regards seasonal credit in cash, the members of the local banks will be called upon to make their needs known twice a year, before the sowing and after the harvest.

The loans effected before the sowing are the less important, except in the case, which should be exceptional, of the farmer being obliged to purchase his seed on credit. By far the more important of the loans must be those granted after the sowing. The following is the plan of working recommended to the local banks by the Regional Bank.

At the beginning of the year, that is to say, after the sowing, in January or February by preference, the management committee of the local bank fixes the individual credit of each of its members for the whole cereal season. This agricultural credit may be based on the extent of the cereals sown, on the way in which the lands have been prepared (the sowings following upon the spring cultivation being those which are the most likely to give a good result) and also on the crop-yield, and lastly, on the different accessory factors which determine the solvency of a farmer: the committee then forwards to the Regional Bank a detailed statement of the amount of these credits, and of the pledges given as security, usually the standing crop itself, with the guarantee of the landowner, when the borrower is a metayer.

After acceptance by the regional bank, the amount of credit to be opened for each farmer is fixed for the whole agricultural season and security is given for the total sum: for example, 15,000 francs. The advance is then made in instalments corresponding to the principal farming operations. It may for example be agreed that the third part, say, 5,000 francs, is to be advanced so as to provide for the expenses of the spring cultivation; the second third for those of the hay-harvest; the last third for those of the corn harvest. The security for the whole 15,000 francs having been given once for all, to obtain the successive instalments only involves the drawing of three bills of 5,000 francs each. These bills will be discounted without any formality except the approval of the local bank.

The giving of a single guarantee bond has the advantage of reducing the work of the local bank; by the breaking up of the loan into several bills interest is only paid on sums actually utilized.

When a bill is drawn, the interest is deducted from the day from which it dates to that on which it falls due, the rate applicable being that adopted by the local bank concerned. For example, if the rate of this bank is 8%,

and if a bill is drawn on 15 February and falls due on 15 August, interest at 8 % for six months will be deducted.

As soon as a bill is negotiated, the net proceeds of the operation become the property of the borrower, who can take it in cash, or leave it on deposit at the Regional Bank, thus getting the advantage of a rate of interest of 4 % on his deposit.

We may note that for the year 1921, a certain number of local banks fixed as the maximum of loans in cash which could be granted to members 200 francs per hectare. This figure applies to farms of an average size, and to lands sown after the spring cultivation.

With regard to purchasing credit which is supplementary to the cash credit, the effect of it is to create a close tie between the local banks and the Central Co-operative Society, whose operations are thereby facilitated. In this case also a credit is opened, once or twice a year, for which security is given. From that time for every purchase effected through the medium of the Co-operative Society, a corresponding bill is drawn, until the limit of the credit opened is reached.

Let us suppose, for example, that a farmer has a purchasing credit of 10,000 francs, and buys motor spirit in barrels containing 500 francs' worth of this product; on each delivery of motor spirit a bill is drawn for 500 francs plus the interest.

This system has the advantage of avoiding all payment of interest on the sums which are not being actually borrowed or utilized.

By way of illustration, we may mention a local bank which opens in favour of its members a purchasing credit calculated at the rate of 50 francs per hectare sown or ploughed. This method is adopted in view of the expenses incidental to the spring cultivation and in order to cover them to a considerable extent.

(b) *Native Thrift Societies.* — That the co-operative agricultural credit banks, although open to natives and gradually more utilized by them, do not meet all their requirements, is to be gathered from the preamble of the Decree of 26 May 1907 on the organization and working of native thrift societies.

"In consideration of the fact that the legislation on agricultural credit," it runs, "although of benefit to the native agricultural population, does not give them the means of procuring the cereals necessary for sowing, and does not assure to the natives the means of subsistence during critical periods: and that it is fitting to put forward a legislation appropriate to these needs and calculated to develop in the minds of Tunisian subjects, the ideas of association, of joint liability and mutual insurance... there is hereby set up in each caïdat a native thrift, loan, mutual aid and insurance society. These societies are to be subdivided into local sections, each composed of one or more sheikhats."

In the terms of the Decree of 1907, only those native farmers were admitted to these societies who were inscribed on one of the lists of the *achour*, of the *canoun* or of the Djerba land tax. The said societies are corporate bodies, can sue and be sued and possess moveable property.

They can legally make loans to one another, but are forbidden to form associations between themselves.

Their resources are essentially, apart from some other sources of revenue, the contributions consisting, to quote Article 9 of the Decree, of "additional centimes, not subject to reduction, paid on the main rate of the *achour*, the *canoun*, and the Djerba special land tax, payable on real property situated in the respective administrative areas of the different societies." The State (Article 10 of the Decree) further puts at the disposal of these latter a temporary advance of a maximum of 500,000 francs taking it out of the million francs advanced to it by the Bank of Algeria. This sum has to be reimbursed in the six months preceding the date on which the State itself is under an obligation to repay the Bank.

After centralization of the funds in the State Bank, the Finance Department opens a current account for each society. In the first quarter of each year, the Finance Department publishes a report on the operations of the thrift societies for the past year.

All these societies are located at the headquarters of their respective *caïdats*, and they all have, in each locality, a branch placed under the control of the *skeikh* of that locality. These branches are composed of two notables who are farmers and a Government agent, and the *skeikh* of the locality, who acts as chairman.

Each thrift society has its president, the *Caïd* of the territory in which it is operating, and among its members a delegate from the Finance Department, as well as the branch presidents, who, as we have just explained are the *Sheikhs*.

There is besides in Tunis a Committee for the supervision of the thrift societies, composed of the Secretary General of the Government, and of the heads of the Finance and Agriculture Departments.

Between 10 April and 15 April of each year, the Committee of Management of each society meets to fix the sum total of the additional centimes. Then towards the middle of August, each branch receives during a period of ten days the objections or claims that may be brought forward in respect of the assessments, examines them and passes them on to the Finance Department, which gives an order on the Treasury to apportion the advances of funds to the farmers of the different regions according to their needs, this to take place in the first fortnight of October. Every application made by a farmer for an advance to be made to him must be guaranteed by the natives of his locality. The advances must be repaid in cash, between 15 July and 15 August of the following year.

On 31 December 1909, a new Decree rendered it obligatory for all native cultivators to pay the additional centimes, which in the first instance had been optional only, and all engaged in agriculture without exception have been enrolled compulsorily in the thrift societies, even the ordinary agricultural labourers or day labourers, the latter however only paying 50 centimes a year.

Finally, a Decree of 26 January 1911 authorized the native thrift societies to grant long term loans running even to fifteen years. These

loans are granted on the security of sureties, mortgages or other guarantees. Their amount, for mortgage transactions, cannot exceed 60 % of the value of the property mortgaged.

The total amount of the loan is paid to the borrower by the society against the deposit of the promissory note signed by the sureties or the title deeds of the property mortgaged. When however the loan has been granted for land improvement or for changing from one system of cultivation to another the amount may be paid to the borrower in several instalments, according to the progress of the work. The society has moreover the right to supervise the expenditure of the money.

Long term loans are granted on condition of: 1. an annual interest which may not exceed 6 % when the property mortgaged is registered and 8 % in all other cases; 2. an annual commission of 1 % of the capital borrowed; 3. in cases where the loan is repayable by instalments an annual payment varying according to the rate of interest and the period within which repayment is to be made.

The transactions of the native thrift societies from 1911 to 1920 are shown in Table II (page 19).

To these transactions, a Decree of 31 March 1919 added the insurance against hail of the crops grown by members of the societies.

For this purpose, counting from the register of 1919 inclusively, the proceeds of the eight additional centimes collected over and above the main rate of *achour* affecting Tunisians or the like, serves to build up in the native thrift societies a special fund intended to compensate Tunisians or other landowners, whose crops are subject to the *achour* and its additional centimes, if such crops have suffered either total or partial damage or destruction from hail during the year, to the exclusion of floods, water spouts, gales or other devastation which may precede, accompany or follow hail.

To gain a right to a share in the apportionment of the special fund, farmers whose crops have been destroyed or damaged by hail must make in respect of each parcel of land and within fifteen days of the occurrence, a declaration before the *Caïd* of the territory who enters it on the register kept for that purpose, and gives an acknowledgement, of which he retains a duplicate. The declaration of the damage must be accompanied by the declaration made for the purpose of the register of the *achour*: it thus shows, together with the nature and date of the damage, the estimated yield per hectare of the crop before the damage, and the valuation of the same yield after it. This is transmitted to the Finance Department to be checked.

If the statement and valuations of the damage are disputed by the representative of the Finance Department and if an understanding cannot be arrived at between the latter and the farmer whose crops have been damaged, an expert is appointed by the local administration to adjust the difference.

In order to calculate the compensation to be allowed on each parcel, the main rate of the tax chargeable on the crop if there has been no

TABLE II. — *Transactions of the Native Thrift Societies.*

Years	Total loans				Cancellations		Difference	Total of sums recovered					Loans outstanding
	Loans of seed	Loans for maintenance	Loans on mortgages	Advances to branches	Totals	Loans for maintenance		Loans of seed	Loans for maintenance	Loans on mortgages	Advances to branches	Totals	
	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
1911	1,727,513.49	—	40,138.70	—	1,777,652.19	—	1,777,652.19	1,766,713.75	—	—	—	1,766,713.75	10,938.44
1912	55,640.80	—	212,402.30	—	268,043.10	—	268,043.10	231,488.20	—	3,471.20	—	234,959.40	13,063.70
1913	1,786,590.37	38,435.18	698,224.03	41,185.29	2,584,395.07	—	2,584,395.07	1,259,517.09	56.55	30,916.73	114,200.00	1,404,633.37	1,322,435.70
1914	431,775.82	83,459.75	544,034.29	23,790.00	1,102,449.86	—	1,102,449.86	137,979.10	16,622.00	57,158.76	47,546.64	259,305.50	—
1915	6,511,225.79	—	217,959.21	77,314.34	6,806,509.34	—	6,806,509.34	3,635,201.75	37,939.00	43,970.04	51,676.75	3,768,887.52	—
1916	1,570,483.26	—	102,181.41	100,856.55	1,773,521.22	—	1,773,521.22	2,087,703.59	14,919.83	63,892.32	89,940.57	2,256,546.03	—
1917	227,867.24	215,887.75	9,255.20	50,130.60	504,640.79	122.70	503,518.09	2,391,707.17	48,009.45	182,539.45	28,480.36	2,622,756.43	1,413,317.76
1918	539,948.26	216,157.60	121.65	897,616.69	1,653,842.20	4,657.95	1,649,184.25	1,530,847.18	74,435.35	80,311.01	133,936.31	1,816,529.85	—
1919	465,555.91	—	1,069.75	160,505.27	625,530.93	2,923.65	622,607.28	678,622.39	68,240.01	166,218.97	596,838.72	1,399,020.09	—
1920	1,315,800.77	—	12,495.45	185,928.79	1,514,225.01	—	1,514,225.01	597,445.50	17,840.57	127,727.28	257,159.64	780,142.99	—
Totals:	14,859,731.71	573,940.48	1,136,390.89	1,337,009.43	18,806,922.61	7,734.30	18,809,188.31	14,356,145.62	273,162.56	738,206.36	996,957.97	16,032,602.70	2,769,875.60

damage is determined; from this is deducted the assessment corresponding to the yield after the damage and the difference is multiplied by 20.

The sum total of the compensation thus calculated cannot exceed in theory the sum total of the special fund. If that does not meet requirements, the compensation is proportionately reduced: on the other hand if it is not entirely used up by the payment of compensation for damage, the available surplus is carried forward to the following year to augment the fund for that year.

In 1919, the insurance fund admitted of the distribution to 1,650 farmers who had thus incurred losses, belonging to eleven different caïdats, of a total sum of 187,501.25 francs, which used up the year's contributions. The results of the season of 1920 were more favourable. The declared losses only amounted to a total of 87,878 francs as against 164,819.11 francs in contributions, thus leaving a reserve of 76,941.11 francs to be carried forward to the contributions of 1921 to form a fund for apportionment in that year.

§ 4. MUTUAL INSURANCE SOCIETIES.

The mutual insurance societies include: the Vinegrowers' Syndicate, giving a compulsory insurance against phylloxera, and the mutual insurance societies against hail and against fire.

(a) *The Vinegrowers' Syndicate.* — On the appearance of phylloxera in Tunis, measures to combat the plague were determined on by a Law dated 29 January 1892. The vines were placed under inspection and in the case of a vineyard becoming infected, the destruction of the plants showing phylloxera was provided for, with compensation to the owners up to the limit of the value of the net product of three average crops which the vine might have been expected to produce, after deduction for cost of cultivation, labour, etc. The cost of inspection and office expenses of the compensation arrangements were defrayed by a special tax.

The inspection of vineyards was put into the hands, if the owner so desired, of a syndicate covering the whole number of the vinegrowing estates in the Regency, but provision was made for the constitution of this syndicate, thus rendered obligatory, only in the event of the demand being made by owners in possession of more than half of the total area planted with vines.

In actual fact, the syndicate thus provided for took shape immediately, and a Decree of 3 March 1892 followed with the object of more closely defining its organization. The administration is in the hands of an assembly of delegates elected by vinegrowers who are liable to the tax. These delegates nominate the bureau of the syndicate, which is composed of a president, a vice president, a general secretary, a native secretary, a treasurer, and four members of whom two are natives. The European delegates nominate the European members of the bureau. The native delegates appoint the native members.

With respect to preventive measures, the vine inspection rests with the syndicate, under the supervision of the Central administration. The syndicate appoints seven agents who are approved by the administration and given a commission conferring a right of entry into the estates in order to make their visit of inspection under the following conditions:

Once a year, between 1 May and 15 September all the vines in the Regency are subjected to a visit of inspection.

Apart from this annual visit, the syndicate must arrange for systematic investigations:

1. In former centres of phylloxera, at least one plant in ten must be thoroughly examined;

2. With American vines, all the stocks are inspected if the plants are isolated or scattered through a vineyard; if they are closely planted, at least one in a hundred must be inspected;

3. with vines under treatment for phylloxera, at least one in a hundred receives inspection.

The expenses of the inspection are covered by the tax which the syndicate collects. This tax, originally 3 francs per hectare, was raised to 5 francs in 1918 and to 8 francs in 1921. In 1920 the contributions amounted to 100,000 francs, 92,000 coming from European (French and Italian) vinegrowers, and 8,000 paid in by the native growers.

The surplus receipts are appropriated to the establishment of a reserve fund, to provide compensation for owners whose vines have suffered damage. It forms the insurance for making good the losses incurred.

(b) *Mutual Insurance against Fire and against Hail.* — The agricultural mutual insurance societies are of much more recent origin, being constituted in pursuance of the Decree of 13 July 1912.

By the terms of this Decree, societies for mutual agricultural insurance can be freely constituted without Government authority, but they have to obtain Government approval of their rules and rates before they can begin operations. They can only be constituted as between farmers, agricultural associations, or persons following an occupation connected with agriculture, such as the manufacture, repair or improvement of agricultural implements. The societies can guarantee their members only against exclusively agricultural risks, e. g. hail, cattle disease, frost, destruction by fire of crops, stock, agricultural material or produce, moveables belonging to farmers, or to persons following cognate occupations, farm-dwellings, and farm buildings.

The Society's capital cannot be formed by the issue of shares. It is built up from the special contributions or entrance fees of members, their premiums or contributions, State subventions or subsidies and those granted by agricultural associations, notably by co-operative agricultural credit banks, gifts or legacies from private persons or the said associations, interest on invested funds and recoveries or benefits obtained through reinsurance.

The Decree lays on the local associations the obligation of reinsurance with a regional association, to which they must turn over such part of the risks as they cannot cover. When they first begin operations, the

local associations may only keep back one twentieth, with the proviso that the figure may be increased as reserves accumulate. Further, compensation can only be paid to the extent of nineteen twentieths of the loss in case of fire, and of nine tenths of the loss in case of mortality amongst live stock.

In its turn, the regional association must reinsure a part of its risks with a Central Association, which itself turns over a part of them to the large insurance companies. The principle of joint and several liability rules in the Regional Associations and in the Central Association, while in the local associations no member can be held bound to make payment supplementary to his fixed contributions. The regional association, as a matter of fact, not only assures the settlement in respect of losses corresponding to those fractions of the risks which it has covered, but also guarantees further the payment of the fraction covered by the local associations affiliated to it, in the event of the resources of the latter being depleted in consequence of serious and repeated losses.

In its turn, the Central Association, over and above the share of the risks that fall to it, guarantees the payment of the portion covered by the regional association, if that body cannot meet it with its own resources.

Such is the legal procedure of societies for mutual agricultural insurance in Tunis. As soon as the Decree of 13 July 1912 was promulgated, a regional association was constituted at Tunis for the branches of hail and fire insurance. It was decided that the area of operations of this association should be extended to the whole of the Regency and that it should be affiliated to the Central Association of Algeria, a powerful body to which 25 regional associations are affiliated.

The Tunis Regional Association has at the present time 23 local associations in affiliation. As may be seen from Tables III and IV (page 23), the progress of the branch of insurance against fire is particularly satisfactory, especially if account is taken of the fact that war broke out less than two years after its organization. During its eight years of activity there has been so to speak a continuous increase in the number of its members, and although the rates are decidedly lower than those of private insurance companies, the surplus of receipts over expenditure has always been considerable.

The position of hail insurance, as set out in Tables V and VI (page 24), is a little less favourable, for out of the eight years 1913 to 1920, three have shown heavy deficits. None the less the total receipts, amounting to 1,053,704.18 francs, come out at 160,288.26 francs over the expenses, which were 892,415.92 francs.

We may infer that even for this branch, the future may be faced with confidence.

*
* *

Such is the network of co-operative agricultural associations in the Regency of Tunis. We will merely add that in order to form a closer link between the various elements, at an extraordinary general meeting held

TABLE III. — Receipts of the Mutual Fire Insurance Societies from 1913 to 1920

Years	Number of members	Assured values	Paid up contributions			Subsidies		Supplementary receipts and recoveries	Total expenditure
			Local associations	Regional association	Central association	Local associations	Regional association		
		fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
1913	364	7,416,737	415.35	540.46	54,465.87	484.98	1,577.62	2,424.90	6,651.11
1914	364	7,487,699	498.03	365.56	52,359.70	1,000.00	2,000.00	3,000.00	6,094.65
1915	569	10,344,743	659.57	7,246.73	76,533.85	833.68	1,686.90	2,500.00	14,264.03
1916	563	14,817,284	775.87	1,553.75	16,885.31	834.65	1,685.35	2,500.00	13,683.93
1917	632	23,231,069	911.64	1,623.31	16,473.73	833.00	1,687.60	2,500.00	13,683.93
1918	751	40,871,966	970.03	1,693.18	208,746.85	833.33	1,687.67	2,500.00	7,840.83
1919	740	41,777,770	1,933.20	3,866.59	206,499.86	883.00	1,687.00	2,500.00	13,759.57
1920	833	50,942,723	3,571.30	7,106.51	206,987.16	3,333.00	6,667.00	2,500.00	10,517.70
									306,742.64

TABLE IV. — Expenditure of the Mutual Fire Insurance Societies from 1913 to 1920.

Years	Number of claims	Compensation paid			Other expenses			Total expenditure
		Local associations	Regional association	Central association	Local associations	Regional association	Central association	
		fr.	fr.	fr.	fr.	fr.	fr.	fr.
1913	9	89.33	90.03	17,850.24	1,662.71	3,236.66	—	22,928.97
1914	6	85.27	171.55	25,716.34	2,182.35	3,862.50	—	32,048.51
1915	6	272.07	644.15	40,435.10	3,773.80	5,273.26	—	50,308.38
1916	17	556.40	1,103.14	31,234.56	2,161.64	5,197.27	—	43,223.01
1917	16	536.17	1,072.34	61,220.02	2,667.92	4,851.15	—	70,356.60
1918	10	536.67	1,053.28	123,095.54	7,235.12	6,532.31	—	139,493.35
1919	24	1,049.21	2,008.58	69,192.02	9,383.50	10,468.54	—	92,101.85
1920	14	1,851.20	3,792.40	109,494.25	14,040.07	13,779.83	2,167.95	145,935.75

TABLE V. — Receipts of the Mutual Hail Insurance Societies from 1913 to 1920.

Years	Number of members	Values assured fr.	Paid up contributions			Subsidies		Supplementary receipts recoveries fr.	Total receipts fr.
			Local associations fr.	Regional association fr.	Central association fr.	Local associations fr.	Regional association fr.		
1913	124	3,236,370	2,663.39	10,654.53	13,316.92	700.00	2,800.00	90.03	33,724.87
1914	154	3,253,261	2,640.06	11,211.12	13,851.18	1,400.00	5,000.00	132.23	41,894.45
1915	254	10,538,211	7,027.87	31,715.92	38,644.78	1,500.00	6,000.00	75.39	94,364.96
1916	215	6,187,325	3,812.87	15,251.28	32,146.58	1,000.00	3,600.00	1,095.04	66,306.77
1917	243	8,672,916	4,745.46	18,931.84	47,744.95	1,000.00	3,600.00	1,724.42	87,195.77
1918	327	21,107,932	6,811.87	32,293.55	143,360.94	1,000.00	5,600.00	4,128.51	198,602.77
1919	331	20,199,860	10,316.68	26,712.65	134,886.92	2,600.00	10,400.00	2,256.52	186,222.77
1920	342	30,963,842	10,077.56	40,070.28	264,117.09	2,600.00	22,000.00	3,187.29	352,592.22

(1) Initial Expenses.

TABLE VI. — Expenditure of the Mutual Hail Insurance Societies from 1913 to 1920.

Years	Number of claims	Composition paid			Other expenses			Total expenditure fr.
		Local associations fr.	Regional association fr.	Central association fr.	Local associations fr.	Regional association fr.	Central association fr.	
1913	14	4,760.12	19,040.46	23,800.58	1,056.57	7,009.82	—	3,115.57
1914	4	1,769.26	11,306.39	13,846.33	1,607.62	4,925.55	—	1,113.68
1915	64	32,340.12	129,330.69	163,035.67	3,514.63	6,018.38	—	26,597.30
1916	9	1,286.82	5,197.32	6,851.39	1,350.74	5,161.20	—	168.92
1917	5	450.22	1,800.85	5,300.91	1,550.08	5,369.20	—	10,838.16
1918	42	11,252.77	45,011.01	194,248.24	7,804.86	9,510.56	—	278,665.60
1919	17	2,517.44	2,089.75	47,071.70	8,411.20	17,205.26	—	82,781.30
1920	7	446.16	1,784.41	7,852.06	16,389.19	15,193.09	434.61	42,099.45

(1) Initial Expenses.

by the different associations on 5 January 1921, on the occasion of the visit to Tunis of M. de Warren, deputy of the department of Meurthe-et-Moselle, and former president of the Agricultural Association and of the Farmers' Society, the following resolution was adopted :

" The colonists, wishing to see the co-operative societies federated on the lines of calling out, linking up and assisting all efforts tending to promote the development of co-operation and the improvement of French and native agriculture in Tunis, propose to organize, under the name of the Agricultural Association, a General Committee of Agricultural Vocational Organizations, the Committee to comprise four sections: Agricultural Credit, Agricultural Co-operative Societies, Mutual Insurance Societies, and Societies for the Study of Agricultural Methods."

The Committee, composed of twelve members appointed for three years, has entered on its labours. With it a new era begins for agricultural co-operation in Tunis.

M. B.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

INTERNATIONAL INSTITUTIONS

A SLAV CO-OPERATIVE AGRICULTURAL CHAMBER AT PRAGUE. — From a communication from the Co-operative Agricultural Chamber to the International Institute of Agriculture.

The Slav Co-operative Agricultural Chamber was founded at Prague on 21 May 1921, by representatives of the most important co-operative Unions of the Slav countries.

At the present time the following Unions are members of the Chamber :

1. Central Union of Agricultural Co-operative Societies, Prague.
2. Popular Bank of Moscow, London.
3. Union of Co-operative Societies of Flax Producers (Russian), London.
4. Russian Co-operative Transport Union, London.
5. South-east Agricultural Union of Co-operative Unions (Russia), Rostoff on the Don.
6. Union of Ukrainian Co-operative Institutions in Foreign Countries, called *Ozuks*, London.
7. Central Co-operative Union of the Kingdom of the Serbs, Croats and Slovenes, Belgrade.
8. Central Co-operative Society, Bratzlaw.

The Co-operative Chamber professes the most absolute political neutrality. None but Slav co-operative agricultural unions can become members of it. Other unions and individuals, or legally recognized bodies, may become extraordinary or corresponding members.

The co-operative council elects a president and three vice-presidents; the council itself is elected by a general meeting of active members.

The administrative and executive organ is the committee of management; the affairs of the Chamber are managed by the secretariat.

The object of the Co-operative Chamber, according to its rules, is the maintenance of mutual economic and intellectual relations among co-operatives of the Slav countries, and the perfecting of such relations.

For the attainment of this the Chamber will undertake especially:

- (a) various publications concerning Slav agricultural co-operation;
- (b) the organization of inquiries, lectures, congresses, exhibitions, etc.;
- (c) a service of information as to the progress of co-operation;
- (d) the study of co-operative organizations, especially in Slav countries;
- (e) the study of co-operative legislation and its revision; the collection, compilation and publication of statistics relating to co-operation;
- (f) the study of the methods of purchase and sale of household utensils and requisites;
- (g) the study of regulations and laws respecting transport, prices, fairs, exhibitions, etc.;
- (h) the protection of the interests of agricultural co-operation.

M. B.

BULGARIA

CO-OPERATIVE FARMING OF MONASTIC LANDS. — *La Réforme Économique*. Paris, 20 December 1921.

According to official statistics, the land owned by monasteries and convents in Bulgaria comprises 25,000 hectares of forest, 6,000 hectares of arable land, 3,000 hectares of meadow, 5,000 hectares of pasturage, 250 hectares of orchards, 45 hectares of vineyards, and 50 hectares of kitchen-gardens. The total value of these estates is about 4,000,000,000 leva; in this figure, however, the value of buildings and other fixtures is not included.

In order to ensure better farming of these estates, the Holy Synod has adopted the co-operative principle. To carry this out, it has issued regulations whereby all the monasteries and convents form a union, which has a common fund, and a central administration, the Holy Synod itself so acting. The 1921 statements of accounts of the monasteries and convents (which number in all 85) show receipts of 10,145,000 leva.

M. B.

FRANCE

1. THE CO-OPERATIVE ABATTOIR OF CANTARANE (AVEYRON) — LAPIERRE (Henry):
Un essai d'abattoir industriel régional coopératif. L'usine de Cantarane. *Bulletin de la Société des Agriculteurs de France*, Paris, November 1921.

The Central Plateau Union, a federation of five departments of central France, all of which are meat-producing districts (1), for the export of agricultural produce with the aim of organizing the produce market on up-to-date commercial lines.

In respect to meat-production, the aggregate available supply in the affiliated districts is more than 200,000 head of cattle, 120,000 sheep, and 200,000 pigs. In Aveyron alone before the war 40,000 bullocks were shipped on the average every year to Paris and the South from Rodez, Capdenac and Sévérac.

There was from all accounts enough production within this quite limited area to maintain on a business footing an abattoir of a certain importance. In 1918, the Union decided on setting one up, and the construction was at once put in hand at Cantarane, near Rodez.

The Cantarane abattoir was planned with a view to carrying out an economic and social programme which may be said to have three guiding principles:

1. To instal an abattoir on completely modern lines with a possible output calculated on the basis of the production of the district served, capable of maintaining itself in a limited area, and intended to ensure to stock-breeders a regular and remunerative outlet for their stock;

2. To annex to such an abattoir a refrigerating installation, intended not for the preservation of meat only, but also for that of all other products of the district suitable for export by the Association, such as poultry, cheese, eggs, fruit;

3. While adopting the legal form of a limited liability company, the only one that allows of raising sufficient capital to ensure the success of such an enterprise, to preserve at the same time as a fundamental basis strict co-operative principles, such as preference given to shareholders who are producers, and premiums to meat-yield, in such a way as to reserve the control and advantage of the enterprise for the producers of the Central Plateau, and further to encourage them to improve their breeds in every possible way.

In France the setting up of large slaughter houses is not likely to be attended with success. The producing areas in which agriculture, commerce and industry are represented in nearly equal proportion are relatively limited and only allow of abattoirs on a similarly limited scale. At Cantarane the slaughterhouse is capable of dealing with about 50 head of cattle per day, and the equivalent in sheep and pigs. This corresponds

(1) For an account of the work of this Union, see the article entitled "The Co-operative Organization of an Agricultural Region" in our issue of August 1920 (page 521).

with the requirements. We may add that the establishment is fitted with American machinery of the latest kind which permits of the treatment of offals and by-products under thoroughly economical conditions. Thus in rooms specially set apart and equipped, fats for human consumption and fats for industrial purposes, neats' foot oil, belly, bone and hide are all treated: after all food products have been obtained, the various offals and the refuse pass into a vaporizer which reduces them to powder and to animal meal.

The slaughterhouse is built in an enclosure of ten hectares thus affording the animals a considerable pasture ground. A siding from the railway line runs into the building with platforms at intervals along it. The refrigerating plant is on the ammonia system. Eight cold rooms measuring 8 metres square are thereby kept at a temperature of 2 degrees centigrade; four of these chilled by dry cold are set apart for the preservation of meat, while four chilled by damp cold are used for cheeses made in the co-operative dairies affiliated to the Central Plateau Union. Certain of these can be equally made available for the preservation of other country produce.

Such in brief resumé is the business aspect.

Of much more interest is the social conception, realized in the unmistakably co-operative form which the Central Plateau Union uses every means to impress on the Export Association. The intention throughout has been to introduce more equitable methods of marketing, and to encourage production and the improvement of breeds.

If the operations of the meat market are examined, it will be observed that they are fundamentally vitiated by an obvious social injustice. For example, the owner of an important stock farm who can arrange to load a whole truck with his own beasts and thus effect a direct sale on the large markets secures profits much above those of the small breeder, who is obliged whenever he wants to sell a single animal to effect the sale through the medium of a series of middlemen, who make their own profits. Similarly the rural market generally gives a better price to the owner of a large herd which he makes it his business to work on the best lines, and this price is often given at the expense of the small producer, less well placed for self-protection.

On the other hand, and in spite of all that has been attempted in this direction, the purchase aspect of the transaction is still more often open to criticism, and it is an extremely difficult matter to arrive at a correct general basis of sale by weight on the large markets: whatever basis has been adopted, there still seems to be something not completely equitable about it. The proportion of actual meat in a beast varies as a matter of fact from 42 to 70 per cent., so that for an equal weight the real value is very variable. A contest of wits is set up between the two parties in the transaction. The buyer often acquires an extraordinary power of estimating at a glance almost exactly what will be the proportion of meat obtainable from the animal he is looking at. He uses this experienced judgment to overreach the seller, and thus to pay him a sum below that

which the meat will to his knowledge fetch. In such a contest, there is perhaps an exercise of business acumen, but no regard for justice.

The Central Plateau Union makes every effort, wherever the owners lend assistance, to reform these abuses. At the Cantarane abattoir the purchases are made by live weight, if the owner consents, but a label is attached bearing the owner's name, and guaranteeing the allocation of extra premiums proportionate to what proves to be the net yield of the beast: very interesting results were obtained even before the place was in full working order. We can quote with a near approach to completeness the results obtained over a special period, relating to sheep: the number of animals slaughtered was about 30,000, and at the end of the period the following bonuses were paid to the producers:

When the net yield was 62 % a bonus of 40 centimes per kilogramme was paid.

"	"	61 %	"	40	"	"	"
"	"	60 %	"	39	"	"	"
"	"	59 %	"	38	"	"	"
"	"	58 %	"	37.9	"	"	"
"	"	57 %	"	37.3	"	"	"
"	"	56 %	"	36.7	"	"	"
"	"	55 %	"	36	"	"	"
"	"	54 %	"	35	"	"	"
"	"	53 %	"	34.6	"	"	"
"	"	51 %	"	20.2	"	"	"

Some owners thus received bonus amounting, according to the quantity supplied, to something between 1,000 and 1,100 francs, for a relatively low number of animals delivered.

This basis of sale permits of the producer obtaining a fairer profit: further the fact that the farmer gradually acquires a feeling of certitude as to equitable prices can only help to bring about improvements in production: finally, since the slaughterhouse becomes the centre from which the products of the district tend to be sold, there results a fixity of prices which the direct sale to the consumer tends to confirm; on this we shall have more to say presently. Speculative manoeuvres are thus greatly curtailed.

The advice, moreover, of those directing the abattoir comes to be taken in regard to improvements in the stock-breeding operations of the area. As they are in direct contact with the district associations from which the Central Association springs, they can take peculiarly effective action in regard to the improvement and selection of breeds: the memoranda they retain of the yield enable them to give valuable advice to the farmer.

As to the interest of the consumer, a still more general matter, the elimination of certain delays and of sundry depreciations in quality, an elimination made possible by the presence of an abattoir of this type in a stock-breeding centre and by the application of co-operative methods, is bringing about in this respect also extremely favourable results. In

certain towns of the area close to the Cantarane installation where the direct retail sale has been organized, it is possible to offer a meat of very superior quality at more than 2 francs the kilogramme below the usual price. Thanks to the co-operative abattoir, it may be said that the retail price of meat will exactly follow the variations of the price of the live animal. Up to the present, the establishment of controlled prices of butchers' meat has been the only means adopted for protecting the consumer. These controlled prices fixed by the municipality can only be fixed after study of local prices and taking of an average valid for a specified period. But in consequence of the serious and repeated fluctuations which characterize the present time, these controlled prices are usually of little economic value, and quickly become nugatory by the incidence of fresh conditions. In fact, they have merely an index value, and sometimes a misleading one at that, causing annoyance to the conscientious trader, and leading an unscrupulous retail dealer into fraudulent practices. In the great majority of cases, the consumer does not himself uphold the strict application of the controlled price. With the co-operative abattoir, on the contrary, in consequence of the publicity of the operations, and of the constant supervision which the public authorities can exercise over purchase prices, there is no need for a controlled price, properly so called. All that is necessary is to keep a watch on the profits required to cover the general expenses, to ensure the normal remuneration of the capital engaged, and to build up proper reserves against future losses. It is in this way that the co-operative abattoir becomes in practice the true regulator of the meat-market, and in many cases, the adviser of the municipality.

M. B.

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2. EXPERIMENTS IN THE CO-OPERATIVE SALE OF WHEAT.— Communication from M. HENRI SAGNIER to the French Academy of Agriculture, session of 9 October 1921.

The co-operative sale of wheat is only just beginning in France, but the experiments already made present some interesting peculiarities of organization. They are of two distinct types.

(1) The first type is represented by the Co-operative Society for the Sale of Cereals established 25 September 1921 among the members of the *Union des Payans de l'Yonne*. This is a limited liability company of which the capital is variable and the shares are transferable. Its initial capital is 50,000 francs, divided into shares of 25 francs. The interest paid on the shares must not exceed 5 per cent. per annum.

Sales of wheat grown by members must be carried out exclusively by the co-operative society. They will be graduated during the whole year according to the conditions of the market.

The wheat will be delivered by the members as directed by the co-operative society. Within thirty days of delivery they receive 70 francs per bag of 100 kilogrammes; the balance will be paid at the end of the

year and will bear interest at 5 per cent. The balance payable will be the difference between the initial payment and the average price determined by adding up all the sales less the general expenses, and dividing the total by the number of quintals sold.

As the co-operative society possesses no warehouses, at least at present, a premium of 50 centimes per quintal per month will be paid to the members from 1 November for the wheat remaining in their possession.

Should any of the members desire, for special reasons, to sell below the price adopted by the co-operative society, it will make the best bargain on their account, deducting 50 per cent. from the selling price. These sales shall not enter into the calculation of the average market price for the year.

All members by the fact of membership are pledged to place at the disposal of the society all their available cereals. There is a penalty for those who sell otherwise than through the society; they are liable to a fine of 5 francs per quintal.

It is understood that the society does not buy wheat to sell it again; it sells exclusively the wheat and other cereal crops of its members.

This example begins to be imitated. Co-operative societies for the sale of wheat have been formed at Brienne-le-Château and at Romilly-Méry in the department of Aube.

(2) The second form of organization for the sale of wheat was inaugurated by the Agricultural Syndicate of the Paris District. It is the system of warrants adopted with the support of the *Compagnie des Entre-pôts et Magasins généraux*.

The members of the Syndicate who wish to take advantage of it can obtain bags for the carriage of their wheat, and send them to the general warehouses. The wheat remains their own property, though the warrant is issued to the Syndicate, and they at once receive an advance of 50 francs per quintal. The sale of the wheat takes place on a day fixed by the owner, after which the balance of the price is paid to him. The Syndicate undertakes all the details of the transaction and the sale.

M. B.

GREAT BRITAIN AND IRELAND

1. AGRICULTURAL CO-OPERATION IN IRELAND IN 1919-20. — REPORT OF THE IRISH AGRICULTURAL ORGANIZATION SOCIETY, LTD. FOR THE YEAR ENDING 31ST. MARCH, 1920. Dublin, 1921.

Owing to the extremely critical times which Ireland passed through in 1920, it was not found practicable to hold an annual meeting of the Irish Agricultural Organization Society; the Annual Report of the Society has, therefore, taken some account of the position of the co-operative movement down to 31 December 1920. The statistical information on which the main body of the Report is based is, however, that for the year 1919, but the list of new societies registered covers the twelve months ending 31 March 1920.

So far as trade turnover is concerned, the statistics included in this Report are based on the returns from 325 creameries, 242 agricultural societies, 62 agricultural banks, 8 poultry societies, 2 federations, 27 flax societies and 19 miscellaneous societies, making in all 686 out of 1,028.

General Progress. — The year 1919 was marked by increases in trade in all branches of the societies' business and in the number of societies and the total membership. In most cases the increases have not been very marked but in one it has been considerable, that of the agricultural societies now often and more accurately designated "general purposes societies." In Table I is shown the progress of the movement in 1919 as compared with 1918: —

TABLE I. — *General Statistics, 1918 and 1919.*

	1918	1919	Increase
Total number of societies . . .	950	1,028	78
Membership,	117,484	135,669	17,885
	£	£	£
Total turnover	9,087,668	11,158,583	2,070,915
Average per society	9,576	10,886	1,310
Average per member	77	83	6

The turnover per head as shown in this table, measured by the nominal membership appears small. This is accounted for partly by the fact that a large membership was added during the year, owing to the increase in the "general purposes societies" and that little or no purchases were made during their first year of trade in these societies. As the total number of societies for whose trade turnover figures are available was 686, the actual average turnover per society was £16,266. A proportional addition to the business transacted per member would work out at about £128 per head which is a better index of the actual volume of trade than is given in the foregoing table.

However the continuous upward tendency in prices may make comparison from year to year misleading. This is illustrated in Table II based on the ratio shown in the Statistical Report of the Department of Agriculture for 1920, dealing with the Irish Imports and Exports for 1919.

The comparison of 1914 values with 1919 is about as 100:247. The ratio used in the above table to obtain an approximate result is as 100:250.

Creameries. — The total number of affiliated creameries on 31 March 1920 was 334. Seven societies had been dissolved in the previous twelve months and two societies became affiliated; one of these had been formed ten years previously, whilst the other was formed in 1919 and is of the new type of creamery which it is believed will be the general type in the future. This creamery undertakes the manufacture of all dairy products, the supply of the requirements of its members and also the sale of their

TABLE II. — *Trade Turnover: Comparisons between 1914 and 1919.*

	Turnover for 1919	Same shown in terms of 1914 prices	Turnover for 1914	Increase (+) or decrease (—)
	£	£	£	%
Dairy Societies.	7,047,079	2,818,831.6	2,731,628	+ 3.7
Agricultural Societies.	1,279,471	511,788.4	197,146	+ 159.5
Poultry Societies.	246,599	98,639.6	65,487	+ 50
Credit Societies.	33,834	13,533.6	52,926	— 290
Miscellaneous Societies.	696,649	278,659.6	187,826	+ 46
Flax Societies.	47,791	19,116.4	2,328	+ 721
Federations.	1,307,160	722,864.0	429,383	+ 68
Total Turnover.	£ 11,158,583	£ 4,463,433.2	£ 3,666,724	+ 21.7

eggs, etc. The Irish Agricultural Organization Society advocates strongly a "general purpose" policy by the creamery societies; already some have taken up bacon curing, flour milling and general trading, with very beneficial results.

The quantity of milk received by the dairy societies has steadily declined since 1916. In that year it was 102,232,055 gallons; in 1919 it had fallen to 78,463,271 gallons. This decline corresponds to a general decline in milk-production in Ireland, especially in Ulster.

There has been in recent years a marked increase in the manufacture of cheese, with a corresponding decrease in the manufacture of butter. Thus in 1916 the dairy societies produced 764,456 cwt. of butter and 13,418 cwt. of cheese, but in 1919 they produced 323,820 cwt. of butter and 277,400 cwt. of cheese.

The average price per gallon paid for milk in 1919 by the different creameries varied from 9d. to 14.85d. per gallon, and the price received for butter varied from 26.30d. to 36.62d. per lb.

Agricultural Societies. — The business done by these societies in 1919 was 159 per cent. larger the business done in 1914. Allowing for societies only just starting to work, the average turnover per head in 1919 was about £30.

Credit Societies. — Although the figures for 1919 show a slight advance on those for 1918, there was no appreciable progress to be recorded. The loans granted in 1919 numbered 3,258 and amounted to £33,834.

Poultry Societies. — The increase shown in the statistics for this type of society, £17,158 over 1918, is in some respects rather misleading. In the 1918 statistics no figures were available for the Athlone Co-operative and Farm Produce Society, but its turnover for 1919 is shown in the Report as £21,229. There are only six societies which are included both in the statistics for 1918 and in those for 1919; and although one of them

shows an increased turnover of 10 per cent for 1919, the aggregate total shows a reduction of close upon £7,000.

Flax Societies. — The primary object of these societies is the working on co-operative lines of flax-scutching mills, but the total turnover shown in Table II includes, besides scutching receipts, value of tow and sale of seeds.

Miscellaneous Societies. — As compared with 1918, the turnover of these societies showed an increase of £223,478. A considerable proportion of this is due to the Wexford Co-operative Meat and Bacon Factory, Ltd., which showed an increase of £147,409 in 1919, and the Roscrea Co-operative Bacon Factory, Ltd., which increased its turnover during the year by £67,135. The Wexford Meat Factory besides increasing its turnover by 63 per cent. has increased its share capital by nearly £8,000, nearly two-thirds of its total capital being raised from that source.

Five milling societies have continued the activities begun during the war and another new society of this type was started in 1919 and has done a business of £8,181.

Federations. — The Irish Agricultural Wholesale Society, Ltd., continues to increase its sphere of operations and the number of its federated societies. The turnover was £1,318,806 in 1919 as compared with £914,241 in 1918 and the number of affiliated societies had increased from 379 to 448. The Report states that the paid-up share capital continues to grow, but the growth is still not proportionate to the increase in trade and therefore extended credit is almost impossible. At the end of 1918 the paid-up ordinary share capital amounted to £14,460. At the end of 1919 this had increased to £16,150 an increase of £1,690, or about 11 %. Preference share capital increased slightly from £11,515 at the end of 1918 to £12,475 at the end of 1919.

The trading of the Irish Co-operative Agency Society, which is a federation of creameries for the sale of butter and the purchase of dairy requisites, was limited during 1919 by the Government Control Scheme. Nevertheless its total sales amounted to £488,354. Considerable increases in the butter sales were shown wherever the society had a free market, for instance in Dublin and Belfast, and the trade in dairy requisites was also well maintained.

W. E. H. L.

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2. AGRICULTURAL CO-OPERATION IN SCOTLAND IN 1920. — REPORT OF THE SCOTTISH AGRICULTURAL ORGANISATION SOCIETY, LIMITED, FOR THE YEAR FROM 1ST JANUARY TO 31ST DECEMBER 1920. Edinburgh 1921.

As we have previously stated (1), the promotion of agricultural co-operation in Scotland is carried on by two propagandist bodies, the Scottish Agricultural Organisation Society and the Scottish Smallholders Organisation. We here give a brief account of the progress in 1920 of the societies affiliated to the Scottish Agricultural Organisation Society.

(1) See our issue of December 1920.

General Progress. — The total number of affiliated societies at the end of 1920 was 199. The registration of four societies was cancelled during the year and 29 new societies were formed.

Table I gives statistics of the membership, share capital and turnover of the societies in 1919 and 1920. The statistics being by no means complete we give in respect of each item the number of societies to which it relates.

TABLE I. — *Membership, Share Capital and Turnover of Societies affiliated to the Scottish Agricultural Organisation Society, 1919 and 1920.*

	1919			1920		
	Number of Societies furnishing returns	Total			Number of Societies furnishing returns	Total
Membership	71	7,864			87	9,241
		£	s	d		£ s d
Paid-up Share Capital	69	17,052	10	4	97	46,302 19 7
<i>Trade Turnover:</i>						
Poultry and Eggs	31	88,422	15	0 1/2	36	86,892 6 10
Dairy Produce	2	123,390	18	2	10	628,642 8 11
Agricultural Produce and Requisites	61	373,032	11	4 1/2	79	481,632 19 11
Total Turnover	68	584,846	4	7	93	1,197,167 15 1

Co-operative Dairy Societies. — The co-operative dairy societies, which for the most part take the form of milk-depots, continue to be notably successful. During 1920, six new dairy societies were formed in Ayrshire, two in Dumfriesshire, two in Kircudbrightshire, one in Stirlingshire, three in Wigtownshire, whilst in Argyshire the Nether Lorn Agricultural Co-operative Society, Ltd. erected, with the assistance of a loan from the Board of Agriculture for Scotland, a small cheese factory at Clachan Seil.

A federation of the co-operative milk-depots regulates the trade of the various societies, prevents injurious competition between them and takes steps to promote their joint action and to secure their common interests.

In Table II is given the turnover of seven of the largest co-operative dairy societies in Scotland for 1919 and 1920.

TABLE II. — *Membership and Turnover
of the Larger Co-operative Dairy Societies.*

Name of Society	Date of Registration	Membership in 1920	Turnover	
			1919	1920
			£	£
Dunlop	1908	36	58,647	61,119
Lugton	1908	36	50,501	46,706
Rowallan	1908	33	51,133	60,057
Stewarton	1910	80	67,723	70,847
Kilmaurs	1910	58	86,331	93,840
Fenwick	1911	34	44,720	105,957
Galston	1915	100	105,957	101,732

Co-operative Egg Collecting Societies. — During 1920 stocks of poultry were still below pre-war numbers; however, a large and gratifying turnover of business is recorded. Most of the egg-collecting societies also buy feeding stuffs, etc. for their members. Among these societies the following are given as examples: Holm (Orkney) had a turnover in 1920 of £16,147 as compared with £4,664 in 1914; Deerness (Orkney) £15,001 in 1920 and £6,399 in 1914; Daliburgh (South Uist) £5,200 in 1920 as compared with £80 in 1914.

The Scottish Farmers and Poultry Produce Federation acts as a selling agency for the local egg societies and buys feeding stuffs for them.

In 1920 the quantity of eggs sold was 198,058 dozen, an increase of 2,577 dozen over 1919. The amount realized on the eggs was £35,704 an increase of £590 over 1919. Feeding stuffs, etc., purchased amounted to £6,104 a decrease of £5,697 over 1919.

Purchase of Requisites. — The affiliated trading societies show a great increase in membership and in the volume of business transacted, especially in the purchase of fertilizers. Among these societies the North-Eastern Agricultural Co-operative Society, Ltd., ranks first with a turnover in 1920 of £150,433 and a profit of £4,714. The second society, the Farmers' Supply Association, Ltd., had a total trade turnover of £107,564.

New Developments. — A co-operative society has been promoted amongst the Clydeside fruit growers, primarily for purchasing all material used in this industry. Active propaganda was undertaken in 1920 in certain West Highland districts where societies already exist to induce the farmers, crofters and small holders to take up the business of small co-operative cheese factories suited to deal with the milk production of that area.

There has been an increase during 1920 of the number of co-operative smithy societies for the work of horse-shoeing and general repair of farm

implements. Societies of this kind have now been formed in the counties of Aberdeen, Banff, Kincardine, Perth, Wigtown and Shetland.

The Scottish Agricultural Organisation Society has expressed to the Board of Agriculture for Scotland its desire to help in the settlement on the land of discharged sailors and soldiers. A considerable number of ex-service men who are now landholders under the Board's scheme have been enrolled as members of affiliated societies, and societies are also being formed for their assistance in certain districts. The Society has expressed to the Board of Agriculture for Scotland its readiness to organize co-operative credit for ex-service men and others.

W. E. H. L.

ITALY

1. ORGANIZATION AND DEVELOPMENT OF THE " FEDERAZIONE ITALIANA DEI CONSORZI AGRARI." — L'ORGANIZZAZIONE E L'ATTIVITÀ DELLA FEDERAZIONE ITALIANA DEI CONSORZI AGRARI. Piacenza, 1921. — FEDERAZIONE ITALIANA DEI CONSORZI AGRARI: ASSEMBLEA GENERALE DEI SOCI DEL 17 MARZO 1921. Piacenza, 1921. — Other information supplied by the Federation to the International Institute of Agriculture.

The *Federazione Italiana dei Consorzi agrari*, founded in 1892, with headquarters at Piacenza and district offices at Rome and Naples is the oldest and most important national co-operative organization existing in Italy. We will here give an account of the main lines of its organization and development, following a report which has recently been published.

A. OBJECTS AND INTERNAL ORGANIZATION OF THE FEDERATION. — According to the rules, as modified by the general meeting of the members held on 11 April 1920, it aims at imparting the greatest possible impetus to agriculture in Italy and in the colonies, and at developing in every possible way the prosperity of the agricultural classes. For this purpose it proposes:

1. To promote the establishment of new agricultural consortia (or co-operative societies for joint purchase and sale), to further the increased activity of those already existing and of similar organizations, such as agricultural associations, agricultural unions, rural banks, farmers' clubs, etc., impressing on them a unity of purpose and action, and encouraging them to combine to form federations;

2. to produce, to buy and to sell, on the account of and in the interest of the members, goods, produce, implements, machines, live or dead stock, and all kinds of agricultural requisites, as well as to sell to non-members, but only in such cases as may be decided by the committee of management;

3. to carry on and to encourage, to the extent and according to the rules laid down by the committee of management, the production and sale of food-stuffs, as well as to promote the formation of co-operative societies for the execution of land improvement works, and for the cultivation of land either by the society or through its individual members;

4. to build and to purchase vessels and any other means of transport;

5. to loan or to hire out machines and implements ;
6. to obtain the information and the means for enabling the agricultural classes to profit by the best markets, as well as to try to obtain special rates in their favour ;
7. to promote in the interests of agriculture the establishment of experimental stations and farms ;
8. to act also as intermediary between the members and other parties, giving, if necessary, its own guarantee, or giving credit to the members, whether with a view to the purchase of articles required by them, or to the sale of their produce.

When the committee of management considers it opportune to do so, the Federation may constitute, for collective purchase, associations participating in the benefits of the federated societies. We shall speak later of these associations.

The internal organization of the Federation comprises the general administration, a business department, an administrative department, a propagandist department, and two district offices.

The general administration, at Piacenza, is composed of a Committee of Management of 12 members and of five accountants, nominated by the general meeting of shareholders, chiefly from among the representatives of federated societies. As it is not, however, possible to summon the Committee frequently, part of its powers are delegated to the manager.

The business department includes two offices :

(a) an office for the purchase and sale of agricultural requisites : chemical fertilizers and their constituents, spraying-materials, seeds and everything intended for supply of the federated societies, except agricultural machinery and implements. There is a transport service attached to this office which deals with despatch, freight and insurance.

(b) an office for agricultural machinery, dealing with the trade in machines and implements, with sub-departments, viz: a staff of technicians, a despatching-office, and a show-*room*.

The administrative department comprises an office for the payment and receipt of money, an accounting office, and a service of inspection. The *Banca popolare* of Piacenza acts as the Federation's bankers. The Federation obtains from numerous banks the credit required for trading operations. The federated societies in the same way obtain credit from the local banks.

The propaganda department deals with propaganda of a technical agricultural kind, and also of a co-operative and economic kind.

Technical propaganda is effected in all parts of Italy by the setting-up of experimental farms, and by demonstrations in the use of fertilizers and selected seeds, as well as by the publication of leaflets of a popular character.

The aim of the co-operative and economic propaganda is to spread knowledge of the progress of co-operation and of the principles to which co-operative agricultural societies ought to conform. The office to which this propaganda is entrusted thus makes it its business to collect and

arrange statistics of the Italian co-operative movement and of the work of the federated societies. This office deals with questions of agricultural economy of general interest and the publication of enquiries and of statistical researches. The organs published are: a monthly agricultural technical review, *L'Italia rurale*, and a weekly illustrated paper, *Il Giornale di Agricoltura della Domenica*, which is both technical and economic in character.

A printing establishment is attached to the propaganda department for the publication of these periodicals and of any kind of printed matter required by the societies.

District offices have been established, one in Rome for Central Italy and Sardinia, and the other in Naples for Southern Italy and Sicily.

An office has lately been opened at Genoa for the overseas business.

B. INFORMATION AS TO THE PRINCIPAL NEW DEPARTURES AND LINES OF ACTIVITY OF THE FEDERATION. — We will now pass in review the principal new departures and lines of activity of the Federation meriting recognition on account of the influence they have exercised on Italian agriculture.

The Co-operative Superphosphate Factories. — From its inception, the Federation has played an important part in the production of and trade in superphosphate, by its action in concluding agreements with the manufacturers, and by encouraging the setting-up of co-operative superphosphate factories. They are 21 in number, 17 in full working, and 4 in construction. The normal yearly output is as follows:

Localities	Normal output of factories in working order (Quintals)
Vercelli	300,000
Portogruaro	250,000
Secugnago	250,000
Ravenna	180,000
S. Elpidio a Mare	160,000
Cremona	150,000
Modena	150,000
Piacenza	140,000
Montebelluna	140,000
Soresina	140,000
Milan	120,000
Mantua	120,000
Novara	120,000
Casteggio	120,000
Cerea di Legnago	120,000
Adria	100,000
Lendinara	100,000
Fossano	90,000
Baguolo Mella	85,000
Melegnano	50,000
Legnago	40,000

The factories under construction are those of Soresina, Casteggio, Ravenna and Modena.

In the Federation, there is a central bureau of co-operative factories which deals with all the technical and economic questions likely to interest them, as well as with the joint purchases of the raw materials.

The Fédération has entered into agreements with the large superphosphate manufacturers. In virtue of these agreements, the distribution of the larger part of this product is in the hands of the Federation. Thus in 1920 out of a total of about 7,000,000 quintals produced by the industry in general, 3,200,000 quintals were placed by the Federation, besides the output of the co-operative factories which is reckoned to have reached 2,000,000 quintals in 1920.

In conclusion, it may be calculated that about three quarters of the distribution of superphosphates for consumption in Italy is under the control of the Federation.

Overseas Transport and the Ship-building Yard of Finalpia. — In 1915 the Federation, in conjunction with certain superphosphate factories, acquired the vessel "Famiglia" for bringing phosphates from Africa. It was the first example of direct intervention on the part of co-operative agricultural societies in the management of means of maritime transport for the supply of agricultural requisites. The Federation afterwards purchased three other vessels.

In 1918 the Federation constructed a ship-building yard at Finalpia in Liguria for the building of ships wanted for the transport of goods required for its purposes. A vessel of about 1,500 tons was launched on 1 June 1920 and is already on transport service. Another of the same tonnage will be shortly launched.

Associations Participating for Collective Purchasing. — Mention has already been made of these. They are based on the principle laid down in Articles 233 to 238 of the Commercial Code. In accordance with these articles an individual or a commercial company may assign to one or more persons or companies a share in the profits and (should they occur) in the losses of one or more commercial undertakings. The association has no corporate existence in relation to third parties. The participants are obliged to receive the goods of which purchase has been arranged, and have the right to examine the profit and loss account.

The Federation up to 1903 confined itself to buying goods wholesale for resale to its members; but from that date it adopted this system for the collective purchase of phosphate, nitrate, potash, copper sulphate, etc., with excellent results.

The special influence which the association in participation has on the market calls for remark. The participants fix the quantity they require without stipulation as to price, and leave it to the managing staff of the Federation to undertake the arrangements for supply. As very large quantities are always involved, it is obvious that the business is negotiated on favourable terms, and that the results are satisfactory from a business point of view.

When the business cannot be negotiated under the form of an association in participation, whether by reason of the nature or the quantity of the goods, the Federation acts on its own account, taking care to obtain orders in advance from the federated societies.

The Business in Agricultural Machinery. — The Federation does a large business in agricultural machinery. In 1920 the sales reached a total figure of 25,000,000 liras; 9,482 ploughs, 2,706 harvesters, 353 tractors, etc., were sold. A keen propaganda campaign is carried on by a special technical bureau with a view to spreading by every possible means the employment of agricultural machinery. The technical engineers of the Federation have visited nearly all the factories of the kind in Europe, and they also attend all the more important foreign exhibitions. Practical courses, conducted by specialists, are frequently held in rural centres with a view to popularizing a knowledge of the machines, and to acquainting mechanics and farmers with the method of working them. It is recognized that this is the most efficacious system for ensuring their more general introduction. Thousands of copies of numerous leaflets are distributed throughout Italy demonstrating the advantages and the economy resulting from the employment of machines, and explaining carefully the method to be followed in handling them, keeping them in order and repairing them. The leaflets also indicate the best forms of collective purchase and joint use, where the operations of a single farm would not give sufficient scope for machinery.

The Production of Selected Seeds. — During the last few years, several agricultural experimental stations have concentrated on the improvement by selective methods of different varieties of wheat. The Federation considered it expedient to place its organization at the service of these researches, so as to bring scientific results directly to bear on practice. With this object, it created in 1919 a special bureau for the production and testing of seeds of pure strains. In 1919-20, 14 large farms, covering 330 hectares in all, cultivated seed wheat on behalf of the Federation. In 1920-21, there were 19 such farms covering 1,100 hectares.

General Influence. — The *Federazione italiana dei consorzi agrari* has always exercised, beyond its purely commercial function, a wide influence as regards the technique of farming and the diffusion of technical methods among agriculturists. For many years past, it has regularly published year-books and almanacs admirably designed to spread such technical knowledge among the rural population. It has further contributed, by means of special enquiries and publications, to the study of larger problems, those of irrigation, co-operative land-holding, motorcultivation, etc. Of late it has undertaken a series of studies on soil-fertilization, and has given financial assistance to several experimental stations. In connection with these, there is a committee for technical and economic studies which includes among its members the leading Italian economists and engineers. This committee meets at irregular intervals, to discuss economic, legislative and technical problems of an urgent kind relating to agriculture. We must not omit mention of the Bureau of Agricultural Legislation, re-

cently set up in Rome, for the purpose of collecting and keeping for reference the documents relating both to bills presented to Parliament, and to laws passed that deal with agricultural matters.

C. GENERAL STATISTICS OF THE DEVELOPMENT OF THE FEDERATION. — These statistics are embodied in the following table, and they have reference to the whole period of the working of the Federation.

*Development of the "Federazione Italiana dei Consorzi Agrari"
from 1892 to 1920.*

Years	Numbers		Shares	Share-capital and reserve-funds	Value of goods distributed
	Societies	Individuals			
				liras	liras
1892	56	32	158	4,200	700,000
1902	300	377	2,058	96,692	4,000,000
1912	693	536	5,999	246,506	18,500,000
1921	939	496	25,370	2,138,242	350,000,000

The following figures, relating to 1920, are the outcome of an enquiry made in respect to 539 affiliated co-operative societies of special importance on account of their commercial activity: membership, 312,590 farmers (occupying owners, tenants, etc.); share-capital and reserves, 50,337,576 liras; fertilizers, machines and other requisites distributed, 808,538,939 liras.

As appears from the account we have given, the Federation is a powerful organization, which, acting as a great centre of supply for the affiliated societies, exercises in addition a marked commercial influence, and at the same time stands for a strong moral bond of unity in the sphere of Italian agricultural co-operation.

G. C.

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2. THE ORGANIZATION AND FIRST RESULTS OF THE BANK OF LABOUR AND CO-OPERATION. — STATUTO DELLA BANCA DEL LAVORO E DELLA COOPERAZIONE OMOLOGATA CON DECRETO 21 MAGGIO 1919. — ESERCIZIO 1919-1920 (1° ESERCIZIO SOCIALE): RELAZIONE DEL CONSIGLIO DI AMMINISTRAZIONE E DEI SINDACI. BILANCIO AL 31 DICEMBRE 1920 E RENDICONTO ECONOMICO. Milan, 1921.

The Bank of Labour and Co-operation was founded in Rome in April 1919 on the initiative of credit institutions forming part of the *Federazione Bancaria Italiana* as a limited liability company, with a capital of 3,000,000 liras, subsequently raised to 6,000,000 liras, fully paid up. Its objects were "to place the benefits of credit and saving at the disposal of production and labour in their various manifestations, with special regard to agricultural and industrial production carried on in the form of small

cultivation and small industries, and especially to finance co-operative land-holding societies, co-operative societies for production and labour, co-operative distributive societies and their local and national consortia or federations, with the forms and guarantees required by the special character of co-operative organizations."

The shares of the Bank cannot be purchased by private individuals, but only by co-operative bodies united in national, regional, provincial, or district consortia, unions or federations, by federations of mutual aid or thrift societies, credit institutions, charitable institutions, and other corporate bodies.

The right of voting in the general assembly is confined to groups of five shares, and the interest on the capital must not exceed 5 per cent. Owing to these limitations, which give to the limited liability company the chief characteristics of a co-operative institution, the Bank has been able to amass large funds, and devote them to the extension of co-operative work in Italy, obtaining, as we shall see, really remarkable results.

It began operations in September 1919 at Milan, and developed rapidly, organizing agencies and branches (at Turin, Rome, Naples, Bergamo, Cremona, Salerno, Magenta, etc.), and instituting offices at the headquarters of other bodies connected with it so that in the chief districts it soon attained a complete and solid organization.

In granting credit, the Bank acts according to the following rules:

(a) it finances only co-operative societies in the zones where it has means of supervizing their constitution and working, either directly (through its branches) or indirectly (through its agencies or affiliated banks); (b) as a rule it does not make advances to isolated co-operative societies, but only to those which are united in consortia or federations; (c) it requires that the co-operative societies which it finances shall be legally recognized, have a regular administrative structure, and possess the technical requisites indispensable for success; (d) as long as the financing continues, it inspects the co-operative societies and supervizes their working by its own administrative, legal and technical staff. The Bank also maintains that vigilance can be best exercised on the basis of a system of supervision which enjoys the greatest confidence of the institutions supervised: it therefore encourages and assists, even financially, the consortia or federations of co-operative societies, so that they may aid and supervize the economic action of the affiliated bodies; it also encourages, by special subsidies those *Uffici di assistenza per la cooperazione e mutualità* which, supported by the *Confederazione Cooperativa Italiana* are arising in every province, with the duty of ensuring the legal and administrative regularity of the co-operative societies by means of a supervision exercised by a select staff, having the entire confidence of the co-operative societies themselves.

Among the central offices of the Banks the *Ufficio tecnico agrario* deserves special mention, because it is consulted about the applications for advances made by co-operative societies, and gives technical assistance to the societies financed, to enable them to accomplish the best results,

not only for the protection of the capital furnished by the Bank, but also for the advantage of the members. In various districts it encourages agricultural labourers to promote different forms of rural co-operation through which they may obtain higher profits from their labour, and consequently attain to a better standard of living. It gives efficient support to co-operative societies in the purchase of land, in the persuasion that the introduction of occupying ownership in districts where small cultivation prevails, contributes to the interests of the national economy, and tends to the maintenance of social peace. In this direction the work of the office takes the following forms: valuation of land, assistance to peasants in negotiations respecting prices and mode of payment, the choice of experts for dividing land, constitution of co-operative societies and technical assistance in keeping their accounts.

The Office also aids co-operative societies in obtaining collective leases of farms, in the purchase of agricultural requisites, in the preservation and sale of the produce of the soil. Many societies owe their origin to its initiative.

The advances made by the Bank in its first year (1919-20) reached the sum of 73,312,200 liras, thus divided: to co-operative societies for production and labour 46,590,100 lire, to co-operative land-holding societies 10,999,500 liras, to co-operative distributive societies 15,922,600 lire. These transactions involved business in bills to the amount of 104,595,037 liras in all. For making loans, the Bank not only avails itself of its capital, but also of savings deposits and deposits on current account and to a greater extent of sums raised by rediscounting bills; the bills rediscounted amount to 87,283,170 liras.

It is worthy of notice that those bodies which held shares during the first working year devoted to laying the foundation of the organization, renounced the dividend due to them, in order to facilitate the formation of the necessary technical staff. The Bank was thus enabled to provide its branches and offices with a body of officials, including twenty three engineers, seven agricultural experts, and six legal advisers, besides the managing staff. It received efficient help in its work from the *Federazione Bancaria Italiana* and from the principal share-holding banks, 42 of which granted on their own account advances amounting to 109,809,757 liras, which, added to the 73,512,200 lire above mentioned, conceded directly by the Bank, formed a sum of 183,321,957 liras, applied in 1920 to financing co-operation, and thus distributed: to the co-operative distributive societies, 59,200,226 liras; to co-operative labour societies, 85,714,184 liras; to co-operative land-holding societies, 38,407,547 liras.

Not less important are the results obtained in the development of co-operative organization. The support of the Bank gave a great impulse to the Co-operative Italian Confederation, the National Federation of Co-operative Distributive Societies, the National Union among Co-operative Societies for Production and Labour and the Central Secretariat of Co-operative Fishing Societies.

Two provincial unions of co-operative agricultural societies (those

of Milan and Cremona), ten provincial consortia of co-operative societies for production and labour, and ten provincial consortia of co-operative distributive societies have arisen with its help, while the remaining forty provincial consortia of co-operative distributive societies and the numerous agricultural co-operative societies not yet federated according to provinces, draw their means of existence from the banks belonging to the *Federazione Bancaria*. In this way more than three thousand co-operative distributive societies, more than one thousand co-operative agricultural societies, and more than five hundred co-operative labour societies were placed in a position to assist in the reconstruction of the national economy. The results obtained with regard to labour co-operation are particularly striking. A large part of Venetia which had been devastated during the war was reconstructed by the Catholic co-operative societies united in the Consortia of Treviso, Belluno, Vicenza, Udine and Trent. About 284 labour co-operative societies completed in the year 1920 public works to the value of about 167,000,000 liras. This form of organization is rapidly extending to other parts of Italy; to the consortia of Bergamo, Milan, Bologna, Naples, Verona and Rome may soon be added those of Turin and Florence, besides those of Calabria and Sicily.

Similarly the Bank has enabled some interesting practical experiments to be made in co-operation for agricultural production in its three forms — the purchase of land for subdivision among peasants, the hiring of land by co-operative societies to be sub-let to the members, and the hiring of land to be directly managed by the society itself. In fact, in 1920 the Bank of Labour and Co-operation enabled 37 co-operative societies of peasants to buy 3,442 hectares of cultivated land to the value of 19,508,045 liras, and 21 co-operative societies were assisted to rent 2,629 hectares of cultivated land.

From this sketch it will be seen that the Bank of Labour and Co-operation does not restrict itself entirely to banking, but through its many initiatives and by an assiduous propaganda, it seeks to exercise an extended influence over the whole Catholic co-operative movement in Italy, propelling it from the centre. The results of the first working year show that this programme has been most favourably received, and that the future of the Bank is opening under the best auspices.

G. C.

LITHUANIA

THE DEVELOPMENT OF CO-OPERATION. — Article by P. SALCUS, President of the Union of Lithuanian Co-operative Societies, in the *Action cooperative*. Paris, 17 December 1921.

Lithuania is a country which is almost entirely agricultural: 86 per cent. of its population is rural, and only 14 per cent. urban. For this reason, as far back as records exist, co-operation in Lithuania has also been agricultural. It possesses an archaic form, one closely connected with the life of the people, the *Talka*. The *Talka* is an institution for carrying out

various kinds of work where manual labour is an important factor. Let us take, for example, the flax industry. Flax has to be scutched, and this must be done very quickly. The peasant invites all his neighbours, and sometimes even all the labourers of the village or of the hamlet. Those who take part in the Talka are for the most part young people. They work quickly and put on speed to vie with each other. The Talka is a form of recreation for them, an opportunity of meeting and passing time together. Generally at the end of the Talka, the host offers a meal to all the workers. No payment is accepted for taking part in the Talka, but there is a moral obligation on the person who has received assistance from the Talka, to render the same himself, and in case of need, to take part in the Talka with his neighbours.

The Talka generally meets for the harvest, the hay-making, and for the transport of wood, etc. It had been developed and was a thriving institution before the rural estates were divided into separate farms. Since that division, it fell into disuse and is more rarely resorted to.

With regard to co-operation properly so called it began with a co-operative distributive society in 1881. From that time, it spread slowly but continuously. The clergy and the intellectuals took an active part in the organization of co-operative societies, as also did the leaders among the peasants and the workmen. However owing to the want of printed matter and the prohibition of meetings, the spread of the co-operative idea was hindered, and the movement made very slow progress. As to grouping the societies into unions, that was not to be thought of. The activity of the co-operative movement increased in intensity only after printing in the Lithuanian language had been authorized, that is from 1904 onwards.

In 1914, there were in Lithuania 200 co-operative distributive societies and 112 co-operative credit societies, besides about 80 agricultural associations and societies. The annual turn-over of the co-operative distributive societies reached approximately 500,000 roubles. The co-operative credit societies of the Kovno district, where there were in existence 62 such societies, had deposits amounting to 2,153,633 roubles, chiefly lodged by peasants.

The war, in destroying the whole economic life of Lithuania, destroyed co-operation too, but, after the proclamation of independence, a special law was passed on 30 January 1919, and a powerful impetus was given to the organization of co-operative societies. The following table will make it possible to estimate the progress achieved in one year.

Progress of Lithuanian Co-operation from December 1919 to December 1920.

Kinds of societies	Number of societies in December 1919	Number of societies in December 1920
Co-operative distributive societies	256	315
Co-operative productive societies	5	25
Co-operative credit banks	11	76

Besides these, in the Vilna region, there are about 140 co-operative organizations of various kinds, of which the greater number are co-operative distributive societies. It is estimated that on 1 January 1921, there were nearly 600 societies in the whole of Lithuania, including the territory of Memel, where there are about 40 co-operative societies. Of these 80 per cent. are rural distributive societies. The co-operative credit societies come next numerically, and are chiefly to be found in the towns, among the Jews, rendering assistance during unemployment, as well as helping the ruined Jewish refugees who are making their way back to Russia; 72,000 co-operators are members of these credit societies. M. B.

LIVONIA.

AGRICULTURAL CO-OPERATION IN 1920. — KRUEHMISCH G.: La situation économique et financière de la Lettonie, in the *Economiste Européen*. Paris, 9 Décembre 1921.

At the time of the annexation of Livonia by Russia, the government displayed hostility to the establishment of companies with limited liability in the provincial towns, and, on the other hand, unlimited liability companies were forbidden throughout the empire, so that the only means of common action within the reach of the rural population was the formation of co-operative associations. This co-operative movement was however for the most part well received, and about 2,000 associations of the kind were in existence in Livonia before the war. Among them the savings and loan banks call for remark, including in these the co-operative credit societies, which have played an important part in the economic development of the country. In addition, a powerful network of co-operative distributive societies and of associations for the supply of agricultural machinery and artificial fertilizers has been brought into being by the farmers, who have also organized on the same basis a large number of produce-sharing tenancies.

Practically all these co-operative undertakings were destroyed by the war, and those remaining were obliged to suspend operations. However a recrudescence of the co-operative movement took place after the proclamation of independence, and on 31 December 1920 about 500 distributive and 72 credit associations were in existence.

M. B.

PORTO RICO

THE FORMATION OF AGRICULTURAL LEAGUES. — REPORT OF THE COMMISSIONER OF AGRICULTURE AND LABOR OF PORTO RICO, 1920. Washington, 1920.

The conditions governing the formation of co-operative societies in Porto Rico are very different from those of Europe and the United States of America. The population is scattered throughout the country and not concentrated in small villages, and the volume of farm products is too small to maintain the existence of the usual form of co-operative society.

To meet these exceptional circumstances a plan has been evolved which consists in establishing in each of the 75 municipalities of the island

an agricultural association of farmers, exclusively residing in that municipality. Such an association is called an "agricultural league" (*liga agricola*). Each league is to be an independent organization, and democratic in character. No distinction is made as to nationality, religion or political creed, but each member must be of good character, the admission of each member being determined by the executive of the league. Besides protecting the interests of farmers and promoting technical progress in agriculture, the leagues will organize farmers' associations, co-operative credit societies, co-operative productive societies, and co-operative distributive societies.

The 75 leagues are to be formed into one federation. The federation will hold two assemblies a year, which delegates elected by each league will attend for the transaction of business and election of the executive committee.

It is proposed to form in connection with each league, co-operative credit societies, which will lend money to the members at low rates of interest on notes signed by two sureties; co-operative distributive societies, and one productive co-operative society for each product in the municipality — that is, one for coffee, one for tobacco, etc.

The proposed method of doing business is as follows:

In the spring the members notify the secretary of the league as to their requirements for the year; these lists are then classified by the secretary and the market quotations obtained. He then sends to the farmer an unreceipted bill and a note to be signed by the farmer concerned and another farmer living in the same district (*barrio*). These papers are to be returned to the secretary by a given date, whereupon the president of the association calls for bids, the order going to the lowest bidder, and where two bids are equal the local merchant is to be preferred. Payment is made in cash, the bank of the league advancing the money on the security of the members' notes.

Notification of the sale of crops is given in the newspapers, and offers of purchase are sent to the secretary by a given date. Preference is always given to local merchants if possible.

All the banks of the leagues are to be united and controlled by the central bank of the federation. By this means the small banks will obtain extra capital from the central on the security of their negotiable instruments.

Up to 30 June 1920, thirty-six leagues had been formed, with a total membership of 4,245. Several of these leagues had already begun organizing co-operative credit societies.

W. E. H. L.

UNITED STATES.

1. AGRICULTURAL CO-OPERATION IN MINNESOTA. — *Northwestern National Bank Review*, Vol. XIII, No. 4. Minneapolis, July 1921.

Since 1914 the increase in the number of agricultural co-operative associations in Minnesota is approximately 65 per cent.

The volume of business transacted by these associations in 1914

amounted to over \$60,000,000. In 1920 this amount had increased about four times.

In 1914 there were about 270 co-operative elevators, and it was estimated at that time that one farmer out of five in the State was a member of a co-operative elevator company. The number of elevators has now increased to 410, which handle about 39 per cent. of the grain of the State.

The number of co-operative live stock shipping associations in Minnesota in 1914 was 115; in 1921 the number was 550, an increase of 378 per cent. The movement began in 1908 in a very small way; today 70 per cent. of the live stock of the province is handled co-operatively. In 1913, the amount of business done by the 115 associations was \$6,000,000; in 1919, when prices were at their highest, the total value of shipments handled was \$40,000,000. About 30,000 carloads of stock were marketed in 1920, double the amount handled during the previous year. In June 1921 a co-operative live stock central selling agency was formed. It is already in an advanced stage of organization and has the support of 85 per cent. of these associations in the State. A manager has been elected and headquarters have been established at South St. Paul.

In 1914 the number of co-operative creameries was 614 or 72 per cent. of the creameries in Minnesota; today they number 635 or 74 per cent. Although the number has not increased very greatly during the last five years, they are increasing faster than other kinds of creameries. Some inefficient plants have been discontinued, the tendency of well-managed ones being to increase in size. The amount of butter handled by these creameries in 1920 was 91 million pounds, valued at \$51,415,000, being 63 $\frac{1}{2}$ per cent. of the total output of the State. Eggs and poultry sales made by these creameries for their clients increase the volume of business by several millions of dollars. In June 1921 the formation of a co-operative central cream selling agency was decided upon by a meeting of delegates representing about half the co-operative creameries of the State. The new combination of creameries aims at the standardization and grading of butter, the reduction of handling costs, centralized shipping facilities and the widening of the market.

Cheese factories have nearly doubled in number since 1914, two-thirds of the Minnesota factories being co-operative. These now number 64. The value of the output in 1920 was \$2,225,000.

With regard to co-operative potato associations, there were 20 in existence in the State in 1914, doing a total annual business of \$100,000; today there are 96 active associations having a total turnover of about \$2,000,000. As a matter of fact, there are 136 co-operative potato associations in the State, but because of very recent organization, a poor crop, or lack of warehouse facilities, 40 of these are inactive. It is estimated that 17 per cent. of the potato crop is now being marketed co-operatively.

In January 1920 a co-operative central selling agency for potato associations was formed, to which about two-thirds of the co-operative potato associations belong. It proved to be a bad year for its inception,

1920-21 being a season of continually falling prices, but the agency has proved its soundness by coming safely through this season.

The total number of farmers' co-operative associations in Minnesota in 1914 was 2,013; this number has now increased to 3,338. These figures include mutual fire insurance and telephone companies, co-operative stores and many other co-operative organizations which are not marketing companies but are controlled by farmers among whom profits or benefits are shared. A list is given below. In some cases the figures are estimates, but these are based on a thorough knowledge of former accomplishment and of present conditions.

Co-operative Associations in the State of Minnesota, 1914 and 1921.

	1914	1921
Creameries	614	635
Elevators	270	410
Live Stock Shipping Associations . .	115	550
Cheese Factories	34	64
Potato Associations	20	96 (active)
Stores	120	200
Fire Insurance Companies	154	162
Telephone Companies	600	1000
Miscellaneous	86	221
	2013	3338

Under the item "miscellaneous" are included for the year 1921, 30 wool shipping associations, 136 breeders' associations, 21 cow-testing, 5 egg shipping and 4 fruit shipping associations, 20 lumber yards, 1 farmers' co-operative laundry and 4 co-operative flour mills. There are about one thousand farmers' social clubs in the State, many of which do collective buying for their members, but this business is incidental and such clubs are not enumerated here; also some of the concerns here listed, such as many of the creameries and elevators, occasionally market produce of various sorts as a side line and engage in the purchase of miscellaneous supplies, but these do not figure in the list as additional buying or selling organizations.

W. F. H. L.

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2. THE CO-OPERATIVE SALE OF ALFALFA HAY IN OREGON. — *Reclamation Record*, Vol. 12, No. 10. Washington (D. C.). October 1921.

For several years there has been an over-production of alfalfa hay on the Umatilla irrigation project lands. In September 1920 a meeting of the farmers was called and a committee appointed to study the question of markets and draw up a plan for co-operative marketing suited to local conditions. On the recommendation of this committee, an association, called the Oregon Co-operative Hay Growers' Association, was formed

on the lines of the Californian marketing associations; no profit is to be made, the returns are to be pooled and the contracts run for three years. The hay is to be State inspected and graded, and sold to consumers direct. The Association expects to realize from \$2 to \$4 per ton more than when the hay is shipped through individual dealers. 1921 was the first year for shipping and the association expected to handle 30,000 tons.

The association hopes to include all the alfalfa districts of Oregon in time. The farmers on the Yakima irrigation project have already agreed to sell through this association.

W. E. H. L.

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3. A CO-OPERATIVE SOCIETY FOR THE SALE OF DUCKLINGS. — *The Florida Grower*, Vol. XXIV, No. 9. Tampa (Florida), 27 August 1921.

Duck raising is an important industry in Long Island and the farmers engaged in it are organized in an association known as the Long Island Duck Growers' Association. Some fifteen years ago this association set itself to improve the method of selling ducklings on the New York market. It selected, at the beginning of each season, the five New York commission houses which it judged would give the most satisfactory service. This method did not materially improve the condition of the duck raisers and in 1914, on the initiative of one of the members of the association, the duck farmers formed a commission house of their own under the name of the Farmers Commission House, Incorporated.

Out of a total of approximately 70 duck breeders on Long Island, 60 are shareholders in this co-operative society. The remaining ten are not members chiefly because they sell their birds alive to Kosher houses. The Farmers' Commission House only deals in killed ducklings not older than ten or twelve weeks. Its policy is to sell the ducklings as the equivalent of the table chicken and not as a luxury, and to create the same demand as at present exists for chickens.

In 1915 the Farmers' Commission House sold 700,000 ducklings in New York City and about 140,000 on Long Island and in other markets. During the war sales dropped to nearly half this amount, but rose again in 1919 to 15,000 barrels of 35 birds each and 18,000 barrels in 1920. It is estimated that during the present year more than 25,000 barrels will be sold in New York City, 5,000 barrels outside the New York market and about 1,000 barrels on Long Island, a total of about 1,100,000 birds.

An advertizing campaign has now been started, the cost being apportioned among the members according to the number of breeding ducks they own. To make the advertizing more effective a trade mark has been adopted. Each farmer will attach a label to the neck of each duck which he markets through the Commission House, with his own name and address on one side and the trade mark on the other side.

The duck farmers have also formed an association for the co-operative purchase of grain.

Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

NORWAY

THE NORWEGIAN SOCIETY FOR MUTUAL INSURANCE AGAINST FOREST-FIRES
— DET NORSKE GJENSIDIGE SKOGSBRANDFORSIKRINGSSKAP, 10 AARS (*Ten Years of Activity of the Norwegian Society for Mutual Insurance against Forest-Fires*). Christiania, November 1921.

In November 1911, on the invitation of a committee of ten members, 50 persons among whom were proprietors owning 190,470 hectares of forest, valued at 17,806,000 crowns, decided to form a mutual insurance society against fire.

The society was constituted on the following 20 February, and 150 more forest-owners were soon enrolled, and from that time it has developed without a check of any kind, as is shown by the figures of assured values, which rose from 44,955,000 crowns on 1 November 1912 to 62,240,000 on 1 November 1913, to 84,543,000 on 1 November 1914, to 102,494,000 on 1 November 1915, to 122,701,000 on 1 November 1916, to 165,059,000 on 1 November 1917, to 219,508,000 on 1 November 1918, to 238,094,000 on 1 November 1919, to 259,124,000 on 1 November 1920, and to 301,113,000 crowns on 1 November 1921. This development however is due rather to the increase in the value of forest products, than to the increase in the area of the forests the risks to which are covered.

Besides this area can only increase more and more slowly as the society covers risks of less and less importance. In 1912 the average value of risks covered was 100,000 crowns; it was no more than 40,000 crowns in 1920, in spite of the increased value of woods and forests.

The Society, which is recognized as being of public utility, has acquired certain important immunities from taxation, which make it possible for it to reduce its premiums to a minimum. The insurance premium is on the basis of 1.25 per thousand but it is subject to a reduction of $\frac{1}{5}$ at the end of four years, and a rebate of 0.4 per thousand at the end of eight years. The consequence is that the average premium per thousand shows in 1916 and in 1920 a very sharp fall. From 1.32 in 1912,

it falls to 1.30 in 1913, to 1.29 in 1914, to 1.30 in 1915, to 1.20 in 1916, to 1.17 in 1917 and 1918, to 1.13 in 1919, to 1.03 in 1920, and to 0.98 in 1921. These variations observable in the different years arise from the fact that up to the present the society has demanded a higher premium for forest areas in districts where no measures exist for preventing forest fires, but as a law in regard to such measures came into force in 1922, this higher charge will be done away with.

The total premiums collected between 1912 and 1921 may be shown thus:

Year	Gross premiums for those insured 4 years	Reduction for those insured 4 years	Second reduction for those insured 8 years	Net premiums
	CTOWBS	CTOWBS	CTOWBS	CTOWBS
1912	58,618.82			58,618.82
1913	80,956.30			80,956.30
1914	110,463.45			110,463.45
1915	133,906.92			133,906.92
1916	158,495.35	11,454.00		147,041.35
1917	212,122.45	19,810.00		192,303.45
1918	281,514.93	28,005.40		253,509.53
1919	303,920.02	34,947.50		268,972.52
1920	332,852.90	40,179.45	25,750.10	266,923.35
1921	382,927.62	50,008.92	38,804.49	294,114.21

Owing to general economic conditions, the expenses of administration show for several years past a continuous increase.

They amounted in 1912 to 0.49 per thousand of the assured capital. They then fell to 0.36 in 1913, to 0.35 in 1914, to 0.33 in 1915 and 1916, and then rose to 0.35 in 1917, to 0.34 in 1918, to 0.37 in 1919, to 0.40 in 1920, and to 0.42 in 1921.

H. M. R. I.

RUSSIA

STATE MONOPOLY OF INSURANCE. — *Zeitschrift für die gesamte Versicherungs-Wissenschaft*, Vol. 22. Berlin, 1 January 1922.

The revival of insurance in Soviet Russia appears under the form of a State monopoly, including among other kinds of insurance, fire, hail, and live-stock insurance. The organization is in the hands of a central administration, attached to the Commissariat of Finance, a body which covers all the branches of insurance previously under the control of the Supreme Council of National Economy. Insurance is to be compulsory, except for foreigners. Until the system of State insurance is completely organized, it will, however, remain optional. Insurance and reinsurance effected by foreign companies are recognized provided the authorization

of the Council of the Commissioners of the People has been obtained in each case. Co-operative associations for the insurance of goods have the right to set up federations.

M. T.

SWITZERLAND

1. LIVE STOCK INSURANCE IN 1919. — RAPPORT DU BUREAU FÉDÉRAL DES ASSURANCES SUR LES ENTREPRISES PRIVÉES EN MATIÈRE D'ASSURANCE EN SUISSE EN 1919. Berne 1921.

Private live stock insurance business in Switzerland depends in a great measure on official institutions with aims analogous to those of the authorized companies. It follows that live stock insurance, in the widest sense of the term, includes, besides private companies which carry on the business in the usual way, the preventive action taken by the State for combating the diseases of live stock, as well as the activities of the numerous local associations to be found throughout the country.

The public institutions, however, directed to combating the diseases of live stock bear no resemblance to insurance organizations except in a very wide sense, since their funds for the purpose are not built up by contributions from the interested parties, but by grants made from the public funds. Besides, these funds are employed rather in preventive action against the diseases of live stock, than in compensating owners of animals that have died as a result of disease.

The State, however, second the work of the companies and of the local insurance societies by granting subsidies. Thus the Confederation subsidizes the cantons that have issued decrees making insurance compulsory for a specified territory (parish, district or canton) and support and supervise the operations of institutions formed for this purpose. Before the war, the amount of the federal subsidies might be equal to the subsidies granted by the cantons themselves. The Decree of the Federal Council of 30 October 1914 limited the subsidy to a fixed sum per head of live stock. The Confederation no longer allows more than one franc per head of cattle insured, and 40 centimes for each goat. These measures had the result of cutting down by about one fifth the allocations to the 17 cantons concerned (excluding Lucerne, Schwyz, Upper and Lower Unterwalden, Zug, the two Appenzells, and Saint Gall). Other details as to live stock insurance will be found in Table (page 55), the data in which are taken from the Reports of the Federal Department of Public Economy.

The fall of nearly 65,000 in the number of head of stock insured in 1919 is due to the fact that the total number in Switzerland was reduced by nearly 100,000 head. The federal subsidies were maintained in the same proportion: on the other hand the cantonal subsidies increased on an average by 29 centimes per head.

Although these subsidies have been granted on a liberal scale the associations with a limited area of operations have not been in a position completely to satisfy insurance requirements. This is probably

TABLE I. — *Subsidies Granted for Live Stock Insurance.*

Years	Number of head of stock insured	Subsidies			
		Cantonal		Federal	
		Absol-ute value	per head of stock	Absol-ute value	per head of stock
		fr.	fr.	fr.	fr.
1912	824,039	988,797	1.20	988,797	1.20
1913	873,033	1,084,043	1.24	1,084,043	1.24
1914	916,909	1,104,032	1.20	1,004,684	1.10
1915	834,067	1,021,870	1.23	791,347	0.95
1916	857,700	1,037,938	1.21	815,389	0.95
1917	851,787	1,060,322	1.24	810,728	0.95
1918	836,856	1,048,825	1.25	797,524	0.95
1919	772,174	1,192,337	1.54	733,486	0.95

due to their dispersion, which interferes with the proper averaging of the risks and makes the establishment of satisfactory financial guarantees somewhat difficult. These drawbacks often counterbalance the advantages which local associations possess (greatly simplified management and ease of watching the insured persons). Thus the local associations have often been obliged to make the owner of the live stock carry too heavy a proportion of the risk, while notwithstanding this they cannot dispense with the conditional right of reducing the compensation.

It is here that the private companies have the advantage. With their more extended area of operations, with their much larger number of policies, and with the support of their much wealthier reserve funds, they are in a position to guarantee the covering of insurance, even for high priced animals, such as horses and pedigree cattle.

For many years, three mutual insurance societies, the *Mutuelle Chevaline Suisse*, at Lausanne, the *Badische Pferdeversicherungsanstalt*, at Karlsruhe, and the *Garantie Fédérale*, at Paris, as well as a limited liability company, at Perleberg (Prussia) had been authorized to carry on live stock insurance business in Switzerland. The same undertakings continued operations in 1919.

Although having ample resources at their disposal these societies are obliged, in view of a risk so severe as that which they undertake to cover, to give the owner of the live stock insured some interest in the proper care of the animals. This result is achieved by allowing each owner concerned to carry a share of the insurance himself amounting to from 20 to 25 per cent. of the assured value. However the limited liability company already mentioned (the *Perleberger Versicherungs-Aktiengesellschaft*) assures the total value of the animal in the case of thorough-bred or half-bred horses, or of race horses, or of butchers' beasts. In 1919 it began as well to cover insurance against the stealing of animals.

In case of necessity the two first insurance societies mentioned reserve the right (if the limitation of the compensation already referred to is not sufficient) to call upon their members to pay a supplementary levy. While the *Badische Pferdversicherungsanstalt* has been able for 21 years to dispense with the collection of a levy from its members, the *Mutuelle Chevaline Suisse* was obliged to make use of this right once, in 1915.

The *Garantie Fédérale* and the *Perleberger Versicherungs-Aktien-Gesellschaft* effect insurance at fixed premiums. But the insured members of the French society, though exempt from the payment of a supplementary levy, are liable to have the compensation reduced. Thus the *Garantie Fédérale* has allowed to the insured members of its Swiss branch the following compensation, in percentage of the assured value of the animals:

	1913	1914	1915	1916	1917	1918	1919
Horses	52	56	60	60	68	72	80
Cattle	54.4	60	80	80	80	80	80

In the case of horses, therefore, it was not until 1919 that compensation could be paid to the full extent contemplated by the rules, that is, 80 per cent. of the estimated value.

Inasmuch as there was again a noticeable increase in the business done, the four societies express themselves generally satisfied with the result of the year's operations. As the price of live stock went up, the sums assured increased in proportion, thus automatically bringing about the payment of supplementary premiums. Each risk taken individually has undergone a noticeable simplification as compared with the pre-war financial years. Among the German societies somewhat high compensation payments are recorded, which taken in conjunction with the increase in general expenses have brought down the profits below those of the preceding financial year. As regards the Swiss society, the payment on losses has been unfavourable, although the sums realized by the sale of the carcasses rose between 1913 and 1919 from 14 per cent. of the total of the gross losses to 35 per cent. of them.

The injurious influence of the war has continued in spite of the signing of the armistice to make itself felt in a large measure in live stock insurance. In fact, besides increase in risks there have been losses of some magnitude in investments of capital. We can form some idea of the increase of general expenses by consulting Table II, which gives the percentage of these expenses in relation to the net premiums, for the financial years 1913, 1917, 1918 and 1919, according to the nationality of the societies.

TABLE II. — *General Expenses*
expressed as a Percentage of the Net Premiums.

Societies	1913	1917	1918	1919
	%	%	%	%
1 Swiss	17.9	23.1	24.1	20.5
2 German	18.5	13.3	15.5	17.3
1 French	28.9	46.2	32.5	41.8

By referring to the figures of Table III which show the development of live stock insurance in Switzerland as effected by the four authorized societies, an idea is at once gained of the disastrous effect of the war.

TABLE III. — *Ratio of Losses to Premiums from 1912 to 1919.*

Years	Sums assured during working year	Premiums	Losses	
			Total	Percentage of premiums
	fr.	fr.	fr.	
1912	17,398,977	635,972	482,214	75.8
1913	18,678,708	632,932	541,145	84.8
1914	20,371,340	604,394	486,023	79.9
1915	13,946,032	573,493	481,580	92.7
1916	12,932,894	520,386	388,816	74.7
1917	13,900,032	496,107	366,752	73.9
1918	23,411,116	718,505	444,718	61.9
1919	31,312,599	866,513	569,995	65.8

The marked increase of sums assured in 1919 as well as in the corresponding premiums, following on the very large increase of 1918, is due to a considerable extent to the fact that the *Perleberger* took up at that date the insurance of butchers' beasts (the sum assured at the end of 1919 was 13,127,750 francs). This form of insurance accounts for 139,931 francs increase in the premiums paid; on the other hand, the percentage of the losses in proportion has again become less favourable.

In live stock insurance, other than that of butchers' beasts, there was an increase in the assured sums of 1,623,608 francs, a total of 18,184,849 francs being thus reached, or nearly the pre-war total. There were 12,039 animals insured in 1919 as against 12,931 in 1918: the average risk per head rose from 1,281 francs to 1,511 francs. An increase of 8,077 francs only is shown on the premiums collected, with a counterbalancing increase in the losses of 33,723 francs, so that the ratio of the losses to the premiums rose slightly, from 65.0 to 65.9 per cent. M. B.

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2. HAIL INSURANCE IN 1919. — RAPPORT DU BUREAU FÉDÉRAL DES ASSURANCES SUR
LES ENTREPRISES PRIVÉES EN SUISSE EN 1919. Berne, 1921.

Just as with live stock insurance, federal subsidies are granted for the encouragement of hail insurance, provided subsidies are also granted by the cantons. At the present time, there are 22 cantons granting such subsidies. These include, besides the recoupment of the policy charges, the payment of a sum amounting to from 10 to 30 per cent. of the premiums. Up to 1914 the Confederation paid subsidies not exceeding the cantonal subsidies in amount, but the decision of the Federal Council of 11 December 1914 lowered the federal grants, and they can no longer exceed 50 per cent. of the policy charges, 20 per cent. of the insurance premiums for vineyards, and 12.50 per cent. of the insurance premiums for other crops. The cantonal subsidies have thus become somewhat higher than the federal subsidies. The attached table, the figures of which are taken from the reports of the Federal Department of the Public Economy, furnishes data as to the subsidies granted to the insurance societies against hail.

TABLE I. — *Subsidies Granted in favour of Hail Insurance.*

Years	Subsidized insurance		Subsidies paid	
	Number of policies	Sums assured	By the Cantons	By the Confederation
		fr.	fr.	fr.
1912	65,421	80,495,107	261,396	261,396
1913	63,408	71,791,081	216,660	216,660
1914	66,661	81,356,404	261,458	261,458
1915	68,829	91,014,971	248,279	225,396
1916	73,104	107,984,053	284,896	258,688
1917	79,894	142,117,917	358,544	325,487
1918	88,739	206,476,184	514,765	481,480
1919	91,692	228,030,817	552,318	518,377

This table is of special interest as showing the immense increase in the value of the crops insured against hail. From 1913 to 1919, the number of policies only rose by about 45 per cent., but the sums assured have more than trebled during the same period. The average sum assured per policy, which was 1,132 francs in 1913 rose to 2,487 francs in 1919. These increases must be primarily attributed to the insurance of cereal crops, where two factors have been contributory, the higher prices of cereals and the larger area sown.

The business of hail insurance has been divided, for many years past, between two undertakings worked on mutual lines, the *Société suisse d'assurance contre la grêle* at Zurich, and *Le Paragrêle* at Neuchâtel. This latter only does business in the canton of Neuchâtel, and only insures vineyards in that canton. The other society extends its operations over the whole Confederation.

The two societies give a very favourable report of the results of business in 1919. The number of cases in which compensation was paid however was nearly five times that of the preceding financial year, on account of the occurrence of several particularly destructive hail-storms.

We may note that in contrast to what has been the case in other branches of insurance, the percentage of commissions and of sundry expenses has shown a marked decrease in comparison with that of the last year before the war. Thus we find the ratio of all these expenses to the net premiums to be 13.4 per cent. in 1919, 13.5 per cent. in 1918, and 13.7 per cent. in 1917, whereas in 1913 the corresponding figure was 16.6 per cent.

Business continued to expand, thus allowing of a large building up of reserves, though less so than in 1918. The cultivation undertaken by order of the Confederation, as well as the rise in the price of agricultural produce have both made their effect felt in a marked development of the operations of the *Société suisse d'assurance contre la grêle*.

The accompanying table gives, for the years 1912 to 1919, the number of policies, the sums assured, premiums collected, the compensation paid, as well as the state of the reserves for both the societies under consideration.

M. B.

TABLE II. — *Results of Hail Insurance Business.*

Years	Policies	Sums assured	Premiums collected	Compensation paid	Total reserves
		fr.	fr.	fr.	fr.
1912 . . .	65,065	80,519,347	1,393,591	654,627	3,758,016
1913 . . .	63,978	71,772,796	1,107,435	902,053	3,899,260
1914 . . .	67,432	81,425,914	1,337,817	531,123	4,683,494
1915 . . .	69,405	91,038,111	1,332,103	1,392,798	4,599,572
1916 . . .	72,493	108,004,123	1,595,189	1,342,359	4,827,274
1917 . . .	80,970	143,138,861	2,745,681	3,443,614	3,985,647
1918 . . .	91,464	209,246,632	3,389,121	424,574	6,642,983
1919 . . .	91,802	225,419,553	3,627,705	2,093,688	8,032,386

Credit

ITALY.

THE DEVELOPMENT OF AGRICULTURAL CREDIT DURING THE WAR.

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The provision of agricultural credit was one of the problems to which the Italian legislature devoted most attention during the war. The necessity at first of overcoming difficulties in regard to credit which arose as a result of the general monetary crisis and subsequently the need of increasing agricultural production, and in particular the production of food stuffs, in order to ensure the food supply of the country, compelled the Government to develop agricultural credit as much as possible. On

examining the measures taken in regard to this matter from 1914 to 1920, we see that they aim at attaining the fundamental object of a more intensive cultivation of the soil, by different systems and methods, and that the measures themselves may be divided into the following groups:

1. Measures for strengthening the security for loans, in favour of the lending institutions;
2. Measures for authorizing new institutions to carry on agricultural credit operations;
3. Measures for simplifying the rules for the granting of loans, and for giving special authorizations and fiscal and legal privileges to credit institutions;
4. Measures for reorganizing the special agricultural credit institutions, so as to render their action more intensive and more effective;
5. Measures for increasing the capital of the principal agricultural credit institutions and for making special allocations of State funds.

Before passing in review these groups of measures, it will be well to describe the organization of agricultural credit as it existed in Italy at the outbreak of war, afterwards dealing separately with the modifications introduced in recent years.

§ I. THE ORGANIZATION OF AGRICULTURAL CREDIT.

With respect to the organization of agricultural credit, Italy may be divided into two parts: one part comprises Piedmont, Lombardy, Venetia, Emilia, and Tuscany; the other Liguria, the Marches, Umbria, Latium, the Southern mainland and the islands. In the former the organization of credit owed its origin to the spontaneous initiative of farmers who formed themselves as required into co-operative societies (popular banks, rural banks, etc.) themselves providing for their credit needs. In the latter, on the other hand, private enterprise was weaker and had to be supplemented by State action. There were thus various laws relating to agricultural credit under which, in accordance with the particular needs of the various regions of Central and Southern Italy and of the islands, special credit institutions were founded. The most important of these laws was that of 7 July 1901, the first of the series of measures relating to agricultural credit in different regions, whereby the Savings Bank of the Bank of Naples was authorized to carry on agricultural credit operations in the provinces of the Southern mainland and in the island of Sardinia, and the Law of 29 March 1906 which established in the Bank of Sicily an Agricultural Credit Section. Other important laws are those of 21 December 1902, of 31 March 1904, and of 25 June 1906, which relate respectively to agricultural credit in Latium, in Basilicata, in Calabria, etc.

The object of the legislation is to establish in the various regions agricultural credit institutions adapted to local customs and to local needs. The characteristics common to the various laws are the following: a central institution endowed with more or less ample means furnished by the State when the institution itself cannot provide them, the object of which is

to make loans to farmers through the medium of minor institutions (agricultural consortia, agricultural and rural banks, agricultural loan banks, agricultural credit societies, *Monti frumentari*, etc.), granting them directly only in exceptional cases when the minor institutions do not exist, are not working, or do not inspire confidence. The functions of these "intermediary bodies" between the central institution and the farmers proved to be of the greatest importance, as they are in a better position to estimate the creditworthiness of the borrower and to ensure that the loan granted is applied to the purpose for which it is asked. As they were not very numerous in the Southern mainland and in the islands, the laws mentioned provided adequately for the encouragement of their formation.

We will now give a brief account of the agricultural credit service of the Bank of Naples — the most important institution that exists in Italy for carrying on this kind of credit operation — in order to give an idea of the method of working of the agricultural credit institutions, and to render more intelligible the measures taken during the war.

A. *Method of Granting Loans.* — The operations which the Savings Bank of the Bank of Naples is authorized by the law to carry on are as follows :

Rediscount of bills drawn by the farmers in favour of the intermediary bodies, and by them transmitted to the Savings Bank ;

Discount of bills drawn directly by the intermediary bodies, either for the purpose of procuring the means necessary for collective sale of their produce, or to provide working capital for the farms cultivated by the institutions themselves, or to make good any deficiency in the funds at their disposal for granting loans to farmers.

B. *Object of the Loans.* — The bills which the intermediary bodies may discount with the Savings Bank must be in respect of loans granted to farmers (whether occupying owners, rent-paying tenants, produce sharing tenants, or tenants in emphyteusis) for one or more of the following objects :

1. (a) Harvesting, (b) cultivation, (c) seeds, (d) fertilizers, (e) spraying materials, veterinary medicines, or insecticides ;

2. To furnish the holdings with live stock, with agricultural machinery and implements, with apparatus for the manipulation and preservation of agricultural produce and with whatever else may be necessary for agricultural purposes ;

3. To provide board for metayers or other produce sharing tenants in accordance with the tenancy agreement, and to agricultural labourers as part payment of wages during the slack season ;

4. For advances on the security of certain agricultural products not easily perishable deposited in common warehouses. These advances are intended to enable the agriculturists to avoid the necessity of selling the produce at the moment of harvest and to give him the means of awaiting a more favourable moment for disposing of them.

C. *Security.* — The loans referred to in paragraph 1 are secured by a special statutory right to levy distress (*speciale privilegio legale*) — by

this expression is understood a prior right which the law gives the creditor to distrain the goods of the debtor according to the origin of the credit (1) — in respect of the crops of the year, except in the case of loans for the purchase of fertilizers and for the cultivation of crops which mature in the second year, in respect of which the right of priority may be exercised with regard to the crops of the following year. This right is derived from the law and appertains to the lending institution, without the need, that is, of any special document or registration. It is only necessary that the object of the loan should be specifically stated in the bills. The same right attaches to loans for providing board to produce-sharing tenants and to labourers in part payment of wages referred to in paragraph 3. The loans, on the other hand, referred to in paragraph 2 are not secured by the statutory right to levy distress, but it may be agreed between the lending institution and the borrowing farmer that the lending institution shall have a special right to levy distress on the produce and on the live and dead stock on the holding; however, in order that this contractual right — which may be defined as a prior right which the law according to the origin of the credit allows to be agreed upon to distrain goods specified by the law itself — shall be valid, it is necessary that it should appear from a written document which shall be given a definite date by means of registration and from inscription in the local mortgage office. Lastly, the loans or advances secured by deposit of agricultural produce referred to in paragraph 4 are guaranteed by the pledge of the produce.

D. Limits to the Amount and Period of the Loans. — The Regulations of 21 July 1904, No. 536, for carrying out the Law of 17 July 1901, also laid down certain conditions with regard to the limits of the amounts and period of agricultural loans. The limit of the amount is 1,000 liras, which may be extended to 5,000 liras, for each holding and for each agricultural purpose, and the maximum period is one year; for loans for the purchase of cattle and of machinery the limits of amount are respectively 2,000 and 3,000 liras (2), and the period is three years.

The loans secured by the deposit of agricultural produce must not exceed three-fifths of the current value of the produce pledged, and the period must not exceed six months, except when part of the debt is repaid, in which case it may be prolonged for another six months.

In any case the loans must not exceed the actual requirements of the holding, and the terms of repayment must be such that the loans made for a particular crop shall be repayable at the time when that crop is

(1) If there are credits each having special right to distrain the same goods, the priority is exercised in the order laid down in Article 1,960 of the Italian Civil Code.

(2) On the basis of a modification introduced by the Lieutenantcy Decree dated 27 February 1919, No. 658, into the 3rd paragraph of Article 18 of the Regulations for the agricultural credit operations of the Savings Bank of the Bank of Naples, approved by Royal Decree of 21 July 1904, No. 536, the maximum limit of the loans for supplying cattle and agricultural machinery cannot exceed 5,000 liras, and the period cannot be longer than three years.

harvested or shortly afterwards, except in the case of crops which mature in the second year, in regard to which the repayment of the loan may be made at any time during the year in which the harvest is gathered.

According to the law, the Savings Bank must not charge higher interest than 4 %. At the present time, in accordance with the decision of its own Council it charges 3 ½ % to the intermediary bodies, and 4 % to the farmer to whom it makes loans direct. The intermediary bodies in their turn, cannot charge higher interest than 6 %.

E. Fiscal Privileges. — Special fiscal privileges have been granted to the intermediary institutions. The proceedings for their formation and successive amendments of the rules, and in general the proceedings and documents relating to the operations carried on by agricultural banks, agricultural societies, agricultural consortia, and *Monti frumentari* are exempt from any stamp tax, registration tax or mortgage tax. Thus the bills which the farmers draw in favour of the intermediary bodies, and those which they draw directly in favour of the Savings Bank of the Bank of Naples in the cases above stated, are written on unstamped paper, and the agreements whereby the contractual right to levy distress is given to the intermediary bodies are also written on unstamped paper and are registered free of charge.

The intermediary bodies are exempt from the tax on personality in respect to this agricultural business, and the tax on the transfer of shares is reduced to a fourth.

For other classes of intermediary bodies which are not purely agricultural but which provide agricultural credit, such as popular banks, savings banks, etc., the stamp tax and registration tax are reduced to a half, if they have not by the ordinary fiscal laws the right to complete exemption.

The regulations which govern the agricultural credit provided out of the funds of the Savings Bank of the Bank of Naples govern also the operations carried on by that bank in the management, entrusted to it by the Law of 2 February 1917, No. 70, of the provincial agricultural credit banks in eleven Southern provinces, namely, Aquila, Avellino, Bari, Benevento, Campobasso, Chieti, Foggia, Lecce, Salerno, Teramo. These banks were established by the Law of 15 July 1906, No. 388, with the object of supplying credit solely for ordinary farming operations, to the exclusion of credit for land improvement, and they work with their own funds constituted as laid down by this law.

Thus since 11 October 1911, the date on which the Law of 2 February 1911, No. 70, came into force, the Savings Bank of the Bank of Naples has provided agricultural credit exclusively out of its own funds in five Southern provinces (Naples, Potenza, Cosenza, Catanzaro and Reggio) and in the two provinces of Sardinia (Cagliari and Sassari) and with the capital of the provincial banks in the remaining eleven Southern provinces in which, when this capital is fully utilized (as has happened in some provinces) it continues to provide credit by using its own funds. Such is the system of State regulated agricultural credit carried out by the Bank of Naples,

and with slight differences by the Bank of Sicily, of which a special section was created for the purpose in 1906.

In Basilicata and in Sardinia, on the other hand, according to the Law of 31 March 1904, and the Consolidating Law of 10 November 1907, a third form of agricultural credit is in operation, a system of advances carried out in the following manner: the central credit institution (for the Basilicata the Provincial Agricultural Credit Bank with headquarters at Potenza, and for Sardinia the *Casse ademprivili* at Cagliari and Sassari) besides rediscounting the agricultural bills discounted by the intermediary bodies or making direct advances to them by discounting their own bills, also makes loans to them in money or kind (up to a limit of 10,000 liras repayable in a specified number of years), thereby enabling these bodies to provide on their own account for loans to individual farmers. What has been said hitherto relates to credit for the provision of working capital, that is, credit to enable the farmers to meet the expenses of sowing, manuring, cultivation and harvesting, as well as to provide live or dead stock, machines and implements; with regard to credit for permanent improvements, dwelling houses, stables and cowsheds on modern lines, farm-roads, irrigation works, changes from one form of cultivation to another, it is governed by special laws for Basilicata and Sardinia, and takes the form of advances to holders in emphyteusis and to agricultural co-operative societies for the purposes indicated. Such advances are secured by mortgage and are repayable by instalments within a period not exceeding fifty years; they may also by agreement be secured by giving the lending institution a special claim on the increased value which the land will acquire as a result of the improvements. On such loans the rate of interest must not exceed 4 per cent., except when they have been made for the construction of dwelling-houses, stables or cowsheds, in which case they must be granted at 2 $\frac{1}{2}$ per cent., the State paying the difference between the special rate of interest and the normal rate.

The Law of 1901, and the laws affecting different regions which followed, formed the legislation in force and really operative in regard to agricultural credit, as the general law of 23 January 1887, No. 4,276, except as in so far as it is repeated in the special laws (and even this was done to a very limited extent) is no longer practically applied.

We now pass to examine the various kinds of measures promulgated during the War and the modifications they have introduced into the system previously in operation.

§ 2. WAR MEASURES.

I. *Measures for Strengthening the Security for Loans in favour of the Lending Institutions.* — In order that the provision of credit might give an effective impulse to production on the scale required by the necessities of the moment, it seemed above all necessary that the Government should promulgate measures for strengthening the security for loans, in order that not only the special agricultural credit institutions, but credit in-

stitutions of all other kinds might be induced to invest their capital in this way.

In fact the provisions contained in regard to this matter in the Italian Civil Code were few and inadequate. Under Article 1,958, No. 5, of the Code, to enforce payments due for sowing, cultivation and harvesting of the year there is special right to distrain the resulting produce. In respect of the produce of lands granted in emphyteusis or let on a rent-paying or produce-sharing tenancy priority over the claims of the landlord is given to claims in respect of loans for (a) harvesting; (b) cultivation; (c) sowing.

The limited protection which the Code gives in regard to loans made to farmers is in striking contrast with the very ample protection which it gives to the landlord in regard to his claims for rent. The landlord in fact has the right to levy distress on the produce of the year, on the produce of the holding itself, stored in the dwelling houses or other buildings belonging to the holding, and on everything which serves for the cultivation or equipment of the holding. This right applies to claims relating to the current year, to the previous year, and to the following years up to the date of the expiring of the existing letting agreement, provided the agreement has a fixed date (Civil Code, Article 1,958).

It would seem therefore that the excessive protection given by the law to the landlord has to a certain extent hindered the development of agricultural credit. Nor was the situation improved by the Law of 23 January 1887, No. 4,276, which authorized the setting up of the contractual right to levy distress of which we have already spoken as a guarantee of loans granted to owners and occupiers of rural holdings by agricultural credit institutions.

In fact the Law of 1887 laid down that the contractual right should relate to the same goods to which the landlord's right relates. It put the two rights on the same footing, declaring, however, that the landlord has the priority over the lending institution, unless the former has waived his right in favour of the latter. It provided, however, that when the right of the landlord came into conflict with that of the lending institution, it should be limited, so far as concerned that institution, to the claims for rent for two years past, for the current year, and for the year following, if the letting agreement had a fixed date. Since it might happen that the goods in respect of which the contractual right was set up were not sufficient to satisfy the claims of the landlord, it was possible that the lending institution would remain uncovered notwithstanding the contractual right authorized by the law.

In 1901 legislation began to be made on agricultural credit affecting different regions. Amongst the most striking innovations introduced by this legislation was the extension of the statutory right to levy distress (Article 1,958, No. 5, of the Civil Code) by the Law of 7 July 1901, No. 334, which authorized the Savings Bank of the Bank of Naples to carry on agricultural credit operations in the Southern mainland of Italy and in Sardinia. This law in fact laid down that the statutory right should be

extended to debts due in respect of fertilizers and spraying materials (Article 5).

This tendency has become more and more marked in the more recent provisions relating to agricultural credit — the tendency, that is, to extend the application of the statutory right of Article 1,958 of the Civil Code which has priority over all other rights to distrain the personal property of the debtor except the right to distrain for legal expenses. By this means, the cumbrous and costly formalities which are necessary for the setting up of the contractual right under Articles 1 and 11 of the Law of 1887 are rendered unnecessary and above all the conflict with the all-engrossing right of the landlord is avoided.

The Lieutenantcy Decree of 17 June 1915, No. 961, extended the statutory right to two other classes of loans, those for the implements for the cultivation of the land and the apparatus for the manipulation and preservation of the products, and those for the expenses of their preliminary handling.

Moreover, introducing a new provision not found in the Civil Code, it was laid down that in the event of a failure in the crop the right to distrain would extend to the produce of the following year, and by the next decree dated 26 September 1915, No. 1,433, it was explained that the crop may be considered to have failed when its value does not cover the expenses of production, certain safeguards being introduced for the ascertainment of this fundamental condition.

Innovations still more radical were introduced by the Lieutenantcy Decree of 10 May 1917, No. 788, the object of which was to intensify the cultivation of cereals. This decree widened the basis of the right to distrain which attaches to agricultural loans, while at the same time maintaining its character as a right arising from the law, that is a right which does not require any written agreement between the parties to bring it into being. Institutions which have granted loans for the purpose of the cultivation of cereals, vegetables and edible tubers enjoy the right to levy distress, not only on the crop to the production of which the loans have contributed, but on all the produce of the holding indiscriminately, as well as on ungathered fruit, and on the produce derived from the holding which is still stored in the dwelling houses and outbuildings annexed to it. The right thus extended keeps the same priority as the right to levy distress on the special crop under the Civil Code, so that the lending credit institution has priority, in the case of concurrent claims, even over the landlord in respect of all the produce specified.

The efficacy of the security is therefore not dependent on the hazard of a single crop, but rests on such a variety of factors as amply to safeguard the lending institution. And since it may happen that in respect of a loan granted for one agricultural year there is a right to levy distress (as occurs in allowing land to lie fallow) on the crop of the following year, and in the meantime the holding if held in tenancy may pass to another occupier, it is expressly laid down that the right may be exercised as against whoever occupies, manages, or cultivates the holding when the

repayment of the loan falls due; thus, by a remarkable innovation of principle, the right to levy distress to enforce the repayment of agricultural loans has been given the character of a charge on the land.

On the other hand, severe penalties are enacted against bad faith on the part of debtors. The Law of 1887 (Article 10) laid down that if the debtor alienates the goods on which distress can be levied without replacing them or allows them seriously to deteriorate or neglects the cultivation of the holding, or in any way whatsoever, by fraud or by neglect, considerably reduces the security of the creditor institution, the latter can apply to have the agreement cancelled under Article 1,165 of the Civil Code. This simple reliance on the ordinary law was one of the reasons why the Law of 1887 produced modest results. It was observed that in the cases contemplated in the provision mentioned it would at least have been necessary to deny to the debtor at fault the benefit of the delay authorized in the article itself. The provision of the decree, according to which when the debtor allows the goods on which distress can be levied to deteriorate, or disposes of them, or employs the whole or any part of the loan received for purposes other than those for which it was granted, he is subject to the penalties laid down by Article 203 of the Penal Code, must therefore be considered as a noteworthy advance on the previous state of the law.

Another useful innovation is that whereby the procedure is simplified: if the debtor does not repay the whole amount of the loan at the due date, the magistrate, on the application of the lending institution, and after taking summary information, may order the goods on which distress can be levied to be distrained and sold, and the sale may take place without legal formalities according to Article 68 of the Commercial Code.

A similar provision was laid down by the Royal Decree of 11 October 1914, No. 1,089 (converted into the Law of 4 January 1917, No. 55) in regard to loans guaranteed by the pledge of agricultural produce. Under Article 4 of this Decree whenever the debtor does not pay on the due date, or the produce deposited seems likely to deteriorate, and the debtor does not extinguish the debt within a period of seven days after receiving notice to do so by registered letter, the lending institution has the right to have the pledged produce sold without legal formalities, according to the rules laid down by Articles 477, 478 and 479 of the Commercial Code.

Lastly, it may be noted that with regard to agricultural associations and co-operative societies the contractual right to levy distress set up by the Law of 23 January 1887, No. 4,276 was in like manner better regulated by the Decrees of 8 October 1916, No. 1,336, and of 26 July 1917, No. 1,269, with rules which considerably increased its efficacy.

By this reform of the right to levy distress to enforce the repayment of agricultural loans, therefore, the security for the loans has been transformed from personal security to a security on the produce of the holding, and has thus assumed a character which better corresponds to the nature of this form of credit. The transformation of essentially personal credit — credit, that is, based rather on the general

solvency and on the financial position of the debtor than on the amount of the gross produce of the farming operations — into a credit which in the main attaches to the land, or, as has been said, is "granted to the land," is one of the most salient features of the new system which has gradually taken shape as a result of the exceptional war measures.

2. *Measures for Authorizing New Institutions to carry on Agricultural Credit Operations.* — Before the war, as we have seen, agricultural credit was provided in Italy chiefly by certain special institutions, each with its own area of operations. When the war came, and in view of the necessity of extending agricultural credit, the right of carrying on credit operations was conferred by the Decree of 11 October 1914, No. 1,089, on the ordinary savings banks and on co-operative credit societies which had at their disposal a working capital, including owned capital and deposits, of not less than 3,000,000 liras. They were authorized to carry on such operations without regard to any provisions of their rules, with the restriction that they were not to employ a sum superior to one fourth of the owned capital. Loans were granted for the following objects: (a) for the purchase, either by individuals or by societies, of seeds, fertilizers, spraying materials, veterinary medicines, insecticides, implements for the cultivation of the land, or apparatus for the manipulation or preservation of agricultural produce; (b) for the expenses involved in the works of sowing, cultivation and handling the produce; (c) for loans on the pledge of agricultural produce deposited in general warehouses or in other stores which offer sufficient guarantee of safe custody and of proper care, whether managed by the lending institutions, by private associations, or by public bodies.

In like manner, the Decree of 10 May 1917, No. 788, by which, as we have already noted, special guarantees were provided in favour of institutions which granted loans for the cultivation of cereals, was intended to bring it about that, side by side with the special agricultural credit institutions, other classes of credit institutions, public or private, should also furnish the farmers with the capital they require. Accordingly, the special agricultural credit institutions, the ordinary credit institutions, the co-operative credit societies, the ordinary savings banks, the *Monti di piet *, the *Monti frumentari*, and the agricultural loan banks were authorized by the same decree to grant loans for the purpose of increasing the production of food stuffs, without regard to any provision previously laid down in laws, regulations or rules; they were also promised advances from the State funds to supplement their capital if they had not enough for the purpose.

The ordinary savings banks and the co-operative credit societies which had at their disposal a working capital, including owned capital and deposits, of not less than 3,000,000 liras, were already authorized to employ one fourth of the owned capital in agricultural credit operations in general, and by this decree they were permitted to go beyond that limit in the case of credit operations with a view to the cultivation of cereals and other food stuffs.

It may here be remarked that the results obtained fully realized

expectations, as in fact many credit institutions of various kinds and of varying importance, belonging to different regions, quickly decided to grant loans in accordance with the decree mentioned, thereby testifying at the same time to the importance which they attached to the increase of agricultural production and to the favour with which the new provisions had been received.

But the most important provision belonging to this group is that contained in the Decree-Law of 22 April 1920, No. 516, by which the formation was authorized of a Land and Agricultural Credit Section of the National Credit Institution for Co-operation which was established by Royal Decree of 15 August 1913, No. 1,140. The Section was endowed with an initial capital of 50,000,000 liras and its objects were to grant loans for providing working capital for the ordinary production, preservation and manipulation of produce, loans for effecting changes in the system of cultivation, and mortgage loans for the purchase or improvement of land.

We must also mention the formation by the Decree of 4 May 1920, No. 661, of a Consortium of savings banks and popular banks in Venetia, for carrying on credit operations for the provision of agricultural working capital in Venetia. It has its headquarters at the offices of the Federal Credit Institution for the Revival of Venetia, established by the Decree of 24 March 1919, No. 497, and also authorized to supply credit for agricultural improvements (planting, changes in the system of cultivation, and minor improvements to lands and buildings), as well as credit for land improvement (erection and repair of buildings, construction of farm roads, laying out, draining and embanking lands, etc.) with the object of thus contributing to the réparation of the damage resulting from the War. By the Decree-Law of 19 November 1921, No. 1,798, the Consortium was replaced by an Agricultural Credit Section of the Federal Institution with the following functions: (a) the granting of direct loans on the security of bills for the provision of agricultural working capital to farmers and to agricultural associations or other agricultural institutions legally recognized; (b) the rediscounting for the institutions which supply agricultural credit in Venetia of the bills drawn in their favour, as security for the loans above referred to by farmers, agricultural associations or other agricultural institutions; (c) the granting of loans for land improvement, and for the erection and alteration of rural buildings. Regulations will shortly be issued for the organization and working of the Section.

3. *Measures for Simplifying the Rules for the Granting of Loans and for giving Special Authorizations and Fiscal and Legal Privileges to Credit Institutions.* — In order to extend agricultural credit operations as much as possible, it was also thought advisable to simplify the rules for the granting of loans and to give special authorizations to the agricultural credit institutions.

Thus the Decree of 11 October 1914, No. 1,089, which we have already had occasion to mention as the decree which, while extending the right to carry on agricultural credit operations, aimed at reducing for the benefit of agriculture the disadvantageous effects of the difficulties in the way of

granting credit, gave various facilities. It authorized the agricultural credit institutions to grant loans on the pledge of produce even if deposited in private stores. It allowed them, subject to the approval of the Minister of Agriculture, to vary the limits to the amount of the loans and the rate of interest laid down by the special laws on agricultural credit. It made general the power of granting direct loans to farmers, where the intermediary bodies did not exist or were not working. It authorized the Savings Bank of the Bank of Naples, in managing the provincial banks, to apply for the benefit of the provinces less provided with funds any surplus there might be in other provinces. It authorized the banks of issue to rediscount the bills discounted by the agricultural credit institutions and by other institutions contemplated by the Decree at a rate one per cent. below the official rate. Lastly it authorized the formation and immediate working of depositories for agricultural produce and other goods subject to adequate guarantees being furnished.

Subsequently by the Lieutenantcy Decree of 17 June 1915, No. 961, an important innovation was introduced whereby the agricultural credit institutions established by special laws were authorised to acquire agricultural machinery for sale or hire to farmers and farmers' associations. The sale might be made on credit guaranteed by the right to levy distress on the machines sold. Moreover, by the Lieutenantcy Decree of 26 September 1915, No. 1,433, the intermediary bodies were given power, notwithstanding any provision in their rules, to make advances of seeds on condition of supplying them at cost price.

These are, as will be seen, decided steps in the direction of carrying on credit operations not in money but in kind, so as to assure the application of the loan to agriculture, and to prevent that credit for the purpose of subsistence should be obtained under the guise of agricultural credit. By this means the objects are attained of encouraging technical progress in the cultivation of the soil, and of distributing agricultural machinery and implements at low prices.

The same decree also authorized the opening of current accounts guaranteed by mortgage in favour of owners who directly cultivate their own land whenever the previous year has resulted in a loss, and the presumed productive capacity of the land is not sufficient security for a new money loan.

Amongst this class of measures the Decree of 10 May 1917, No. 788, is particularly important; with the object of promoting the increase of the cultivation of cereals, vegetables and edible tubers, it greatly simplified the formalities for agricultural credit operations. In virtue of this decree, in fact, no special act, nor any registration, is needed for these operations. The loan is made by means of a simple bill in which it is sufficient to mention the object of the loans, the holding in respect of which it is granted, and the Decree. The right to levy distress to enforce the repayment of the loan springs from the law itself, without the need of any agreement between the creditor and debtor. Moreover, no limit is fixed to the amount of the loan, nor to the period for which it is granted, both being

left to the discretion of the lending institution, which in deciding them must take account of the requirements of production and of the interval between the date at which the loan is made and that of the gathering of the crop to the production of which the loan is to be applied.

But, in order that agricultural credit operations might really be of appreciable assistance to farmers, it was necessary they should be made on terms not too burdensome; provision was made for this by granting fiscal and legal privileges of varying importance. Thus the Decree of 11 October 1914, No. 1,089, granted total exemption from the tax on moveable property and from stamp, registration and mortgage duties, in regard to all the operations carried out by the institutions in question, as well as the reduction by half of the charges in respect of the legal action which may be rendered necessary by the debtors' default. The exceptional privileges granted in favour of loans for the cultivation of cereals were completed by the Decree of 10 May 1917, No. 788.

By the Decree of 26 September 1915, to which we have already referred, owners who cultivate their own lands were exempted from the payment of any duty on the acts or documents of any kind required for opening current accounts secured by mortgages, while the duties payable by the mortgagees were reduced to half. Other decrees provide that the documents by which the contractual right to levy distress is set up, in cases in which the lending institution has not the right to complete exemption from stamp and registration duty, shall be drawn up on paper bearing a stamp of the value of 1.05 liras, and shall be subject to the fixed minimum registration duty. These documents are exempt from stamp and registration duty when they relate to loans granted to agricultural associations legally constituted as co-operative societies or otherwise (Decrees of 26 July 1917, No. 1,269, of 22 April 1920, No. 516, and of 7 June 1920, No. 775).

No duty or fee of any kind is payable in respect of documents relating to operations carried out by the Agricultural Credit Section of the Bank of Sicily or by the Land and Agricultural Credit Section of the National Credit Institution for Co-operation (Decrees of 22 April 1920, No. 516, and of 7 June 1920, No. 775).

In general, it may be said that all the principal measures taken to encourage agricultural credit were accompanied by fiscal and legal privileges, these being considered indispensable to ensure their success.

4. *Measures for Reorganizing the Special Credit Institutions so as to Render their Action more Intensive and more Efficacious.* — When the number of institutions providing agricultural credit had been increased, the system of levying distress to enforce the repayment of agricultural loans had been reformed by substantial modifications, and authorizations and facilities of various kinds had been granted for the making of loans to farmers, it still remained to reinvigorate the working of the institutions created by special laws by means of suitable changes in their organization. This was provided for by the various laws and decrees of which we will now speak.

The Agricultural Credit Section of the Bank of Sicily. — This institution was reorganized and vested with new powers by the Decree-Law of 7 June 1920, No. 775, followed by the Regulations of 19 September of the same year (No. 1,418).

Under these measures, which respond fully to the requirements of Sicilian economy of to-day, the Agricultural Credit Section can grant loans and open current accounts secured by mortgage, for the purchase of land, for enfranchisement of land from dues and charges, for land improvement and for changes in the system of cultivation, in the same manner as the Land and Agricultural Credit Section of the National Credit Institution for Co-operation. Specially worthy of notice are the operations, also authorized by the Decree mentioned, for the purpose of enabling public bodies, agricultural co-operative societies and other agricultural credit institutions in Sicily to acquire land for the purpose of improving it and dividing it into lots to be let to persons who will directly cultivate it.

The maximum period for which current accounts might be opened was fixed at five years and the maximum period of loans at 30 years. The State contributes to the extent of 2 ½ per cent. towards the interest payable on loans, which can thus be granted at low rates of interest.

In regard to credit for the provision of working capital, the Section was authorized to grant loans for the following purposes, in addition to those purposes for which it could grant loans under the Laws of 29 March 1906, No. 100, of 15 July 1906, No. 383, and of 2 February 1911, No. 70, and the Regulations issued for carrying out those Laws: (a) to enable the intermediary bodies recognized by the Bank to provide the caution-money payable on taking a collective lease; (b) for hiring machines and implements and for the cost of insuring them; (c) for the manipulation and preparation of produce. This extension of the purposes for which loans were made was authorized in order to satisfy all the requirements of the agricultural industry and with the same object the limits previously fixed to the amount of the loans were removed and the Section was authorized to make the loans commensurate with the actual requirements. This was a rational innovation which was calculated to produce the most beneficial results.

Long term land and agricultural credit will be provided by the Section out of its own capital, or if this should prove insufficient, out of borrowed capital. The Section can issue bonds, corresponding to the loans guaranteed by first mortgage and in accordance with the rules laid down by the laws on land credit, up to an amount equal to ten times its owned capital.

As the new credit operations involve the necessity of inquiries, valuations and inspections of a technical character, the Regulations of 19 September 1920, No. 1,418, laid down that a special panel was to be drawn up, from which the experts were to be chosen to report in each case on the technical aspects of the various applications for loans or to carry out the inspections necessary when loans were granted by instalments according to the progress of the work for the carrying out of which they had been applied for.

A Central Credit Committee was also formed in the Section having, amongst other duties, those of fixing the principles upon which agricultural credit should be given, of proposing to the Management Committee of the Bank the rules to be issued on the subject, of giving its opinion on general questions and on the interpretation of the provisions of the laws and regulations.

A Government Commissioner will watch over the working of the Section and over the steps to be taken in order that the operations connected with the dividing up of lands, with land improvement and with changes in the system of cultivation, should be carried out with the aid of the technical bodies attached to the Ministry of Agriculture.

This new system, which extends to the full the work of encouraging agriculture in Sicily which is entrusted to the Section and greatly increases its efficacy, is the outcome of the new conception which has arisen during the War as a result of the difficulties of provisioning the country — the conception, that is, of all operations connected with agriculture as being no longer a private interest, but a vital interest of the whole nation.

The Provincial Agricultural Credit Bank for Basilicata. — This institution has its headquarters at Potenza. It was established by the Law of 31 March 1904, No. 140, for the purpose of providing the farmers of the province not only with working capital but with the capital required for land improvement. However the experience of more than a decade showed the necessity of some amendments to the provisions of the Law and these reforms were sanctioned by the Decree of 22 June 1919, No. 1,190.

It must be premised that Article 1 of the Law of 31 March 1904, as amended by the Law of 9 July 1908, No. 445, assigned the following objects to the Bank:

(a) to make advances in money or in the form of machinery or implements to *Monti frumentari*, to agricultural banks and to agricultural consortia in the cases and in the manner laid down by the Law and the Regulations; (b) to make advances to tenants in emphyteusis and to agricultural co-operative societies which are carrying on agricultural or similar undertakings provided that the loans shall serve exclusively for the building of dwelling-houses or of up-to-date stables and cowhouses, for the construction of farm roads, for providing the holdings with drinking water, for irrigation works, for the enclosure of open lands with walls or hedges, for making plantation or for reforestation, for the purchase of cattle, implements, raw materials or other requisites; (c) to make advances to landowners and managers of properties for purposes of land improvement.

To these powers were added, by the Decree mentioned, those of making loans for the enfranchisement of lands from dues and charges, and for the purchase of land for the formation of small peasant properties, as well as to carry on all banking operations which might be useful to the agricultural clientele and be in conformity with nature and aims of the Bank.

Simpler and at the same time more complete rules were also laid down for the management of the Bank. And since experience had shown that the Bank could with difficulty carry on its work through the medium of

the local bodies contemplated by the Law, as these, owing to inadequate means and want of direction, lived a meagre existence and showed little sign of activity, the Bank was authorized to establish agencies or branches wherever there was need. It was further laid down that the *Monti frumentari* and agricultural banks which were not doing useful work should be compulsorily amalgamated with the *Monti frumentari* or agricultural banks in adjoining communes, and both kinds of institution were placed under the direct supervision of the Ministry of Agriculture.

The Victor Emmanuel III Credit Institution for Calabria. — This institution, which was established by the Law of 25 June 1906, No. 255, and is divided into three sections with headquarters at Cosenza, Catanzaro and Reggio Calabria, provides credit for working capital, but by the Decree-Law of 2 February 1922 the three sections were made independent; they have taken the names of the Victor Emmanuel III Agricultural Credit Institution of Cosenza, Catanzaro and Reggio Calabria respectively, and have obtained the means (30,000,000 liras in all) for providing credit for agricultural improvements in conformity with the special needs of the region.

The Provincial Agricultural Credit Banks of Cagliari and Sassari. — The measures taken in favour of Sardinia are particularly important. Two Provincial Agricultural Credit Banks were established, called *Casse ademprivili* because all the former *ademprivili* lands (1) were assigned to them free from servitudes, charges, or joint ownership. Of these lands those which were already wooded or were to be reafforested were to have been handed over to the Forestry Administration and those which were fit for cultivation were to have been divided up and granted in emphyteusis. However, it soon became apparent that the Banks were not suitable organizations for managing these lands, while they were really admirably adapted to the provision of agricultural credit. Recent provisions, contained in the Law of 8 October 1920, No. 1,479, have accordingly introduced radical changes into the system previously in force, with a view to making of the Banks two strong institutions endowed with ample power and adequate means. They are now called Provincial Agricultural Credit Banks, and are authorized to carry on all operations for the provision of credit for farming, for land or agricultural improvement and for the purchase of land for the formation of small peasant properties, as well as to carry on such banking business for the benefit of their own clients as may be considered useful for the Banks' own purposes, in the same manner as was laid down for the Basilicata and in order to meet the most pressing needs of the agricultural economy of Sardinia.

The composition of the Committee of Management of each of the two Banks has also been modified, so that it is now composed exclusively of experts in regard to agricultural credit, and a permanent Discount Com-

(1) The former *ademprivili* lands were the lands subject to rights of *ademprivio*, which included rights of sowing, of grazing, of cutting wood, of making charcoal, of cutting plants, etc.

mittee has been formed with the object of securing the best and most rapid conduct of the business (r).

The Agricultural Credit Institution for Latium. — During the debates on the Law which authorized the Savings Bank of the Bank of Naples to carry on agricultural credit operations, Parliament was asked by influential persons to take steps to raise the condition of agriculture also in Latium, where no institutions existed for taking the farmer out of the hands of the usurer. The Government acceded to the request and by the Law of 21 December 1902, No. 452, established in Rome an Agricultural Credit Institution for Latium, empowering it to supply credit exclusively for the provision of agricultural working capital. It was afterwards thought advisable, however, that it should be placed in a position to employ its surplus deposits in loans for agricultural improvements and so to contribute to the intensification of cultivation in Latium, and it was accordingly authorized by the Decree of 12 June 1919, No. 997, to grant such loans.

By the Decree of 28 December 1919, No. 2,638, its rules were further modified so as to empower it to grant loans for agricultural improvements and changes in the system of cultivation to consortia and other legally recognized institutions which have their headquarters and carry on their business in the Province of Rome, as well as to individual farmers resident in the province.

Another important Decree was that of 14 July 1918, No. 1,142, which authorized the Agricultural Credit Institution for Latium and other institutions to grant loans to the agricultural organizations of the region for the purchase of land, for the payment of capital sums or of rent-charges or for the enfranchisement of the land from dues. The organizations in question are the so-called "*università agrarie*," the associations formed in some communes in Latium and in other provinces of the former Papal States for exercising and safeguarding the common rights of sowing, grazing, cutting wood, etc., in the interest of the rural communities, or for the cultivation of the public lands.

This decree provided for a need strongly felt in Latium and fulfilled the desires of its agricultural population, opening up a new and simple way to these organizations to acquire larger areas of land and to improve the lands which they already possess.

As will be seen, the organization of the institutions above-mentioned has been modified in such manner as to adapt them to the growing needs of agriculture and the new aspirations of the rural classes. This is particularly the case with the measures taken to intensify the work of land improvement or of changes in the system of cultivation and to encourage the acquisition of land by persons who will directly cultivate it, home colonization and the formation of small holdings; these measures will certainly result in giving a new direction to agricultural credit operations.

(r) The Regulations for the exercise of Government supervision over the agricultural credit institutions of Sardinia were approved by Royal Decree of 10 March 1921. See the *Gazzetta Ufficiale del Regno d'Italia*, No. 110, Rome, 11 May 1921.

5. *Measures for Increasing the Capital of the Principal Agricultural Credit Institutions and for making Special Allocations of State Funds.* — The reorganization of the special agricultural credit institutions of which we have spoken was generally accompanied by an increase in the capital placed at their disposal, in order that the work of the various institutions might develop to the full and in the most effective manner possible. Thus the Agricultural Credit Section of the Bank of Sicily which had no capital of its own and confined itself to administering that of the Provincial Agricultural Credit Banks was assigned, by the Decree of 7 June 1920, No. 775, which extended its powers, the capital of these Banks with the corresponding increases, together with a sum of 10,000,000 liras advanced by the State without interest, making in all about 17,000,000 liras. Further large sums were placed at its disposal and it was authorized, as we have seen, to issue mortgage bonds in order to procure the money required for making loans guaranteed by first mortgage.

To provide the Provincial Agricultural Credit Bank of Basilicata with means proportionate to the volume of business to be transacted, it was authorized by the Decree of 22 June 1919, No. 1,190, not only to accept savings deposits, but to postpone the repayment of the advances made to it by the State either for the purpose of giving loans to the farmers whose crops had been destroyed by moles, or loans to encourage the increase of cereal-growing in the agricultural years 1917-18 and 1918-19. These advances amounted to 5,450,000 liras and are to be added to the 2,000,000 liras assigned to the Bank by the Law of 1904 by which it was established and to other contributions and surpluses.

Provision was made for increasing the capital of the Provincial Agricultural Credit Banks of Sardinia by postponing the repayment of the advances made to them by the State, by advancing to them the sum of 8,000,000 liras allocated to the granting of loans for agricultural improvement in the terms of the Law of 16 July 1914, No. 665, or authorizing them to alienate the *ademprivili* lands assigned to them, or, lastly, by authorizing them to accept savings deposits or deposits on current account.

Further, by the Lieutenantcy Decrees of 28 June 1917, No. 1,035; 11 November 1917, No. 1,831; 14 April 1918, No. 566; 14 July 1918, No. 1,100; 15 September 1918, No. 1,444; and by the Royal Decrees of 20 July 1919, No. 1,414; 13 March 1920, No. 421, and 10 November 1920, No. 1,636, provision was made for promoting the increase of cultivation in the agricultural years 1917-18, 1918-19, 1919-20 and 1920-21 by means of advances to the agricultural credit institutions established by special laws and particularly to the provincial banks of the provinces which had suffered from the depredations of moles. The advances out of State funds made in accordance with these decrees amounted to 117,000,000 liras. By the Lieutenantcy Decrees of 20 February and 25 May 1919, Nos. 318 and 943 and by the Royal Decree of 20 July 1919, No. 1,363, advances of 120,000,000 liras were made to the credit institutions carrying on business in the provinces of Venetia which had been invaded by the enemy or damaged by the War, in order to enable them to grant loans at specially low rates

of interest to facilitate the resumption of agricultural activity in that region.

The special form of credit which we have just described is known as extraordinary credit to distinguish it from the ordinary or normal credit contemplated by the fundamental laws of 1901 and 1911. Ordinary credit is, as we have seen, limited to a certain maximum amount for each holding and each purpose, whereas extraordinary credit may be granted, without limit of amount, at so much per hectare whatever may be the area cultivated.

Moreover, ordinary credit is granted to certain classes of persons which we have already enumerated on the security of different forms of guarantee, whereas the advances made with State funds are granted to any class of cultivator, without any other security than the right to distrain the resulting produce. The provisions adopted in 1919 (Royal Decree of 20 July, No. 1,414, and Ministerial Decree of 12 September), besides increasing the sums assigned for extraordinary loans, varied slightly the purposes for which this credit was provided; instead of being confined to the cultivation of food-stuffs, the purposes were extended to include other kinds of cultivation, as well as to pay the expenses necessary for the utilization and transformation of produce and the purchase of implements, machinery and live stock. Loans for the purchase of live stock were limited to 10,000 liras for each holding and if more than one holding was managed by the same farmer he was not entitled to obtain more than two loans; it was also made a condition of obtaining such loans that the live stock should be insured. The repayment of loans for the purchase of live stock or of machinery was to be made by annual instalments. The rate of interest payable by the farmer was not to exceed five per cent., whatever institution granted the loan. These provisions somewhat lessened the differences, to which we have above referred, between the extraordinary and the ordinary credit.

To give an idea of the extent of the extraordinary agricultural credit operations it is sufficient to note that from the time when the special loans began to be given up to the end of 1920, the Savings Bank of the Bank of Naples and the Provincial Banks managed by it granted loans to farmers amounting to 184,294,296 liras.

§ 3. THE CONSOLIDATION OF THE LAWS RELATING TO AGRICULTURAL CREDIT.

It is clear from the foregoing that the Italian Government has made great efforts to give to agriculture adequate assistance in view of its growing and manifold requirements. Of this assistance the farmers have largely taken advantage. They have obtained from the two principal agricultural credit institutions alone — the Banks of Naples and of Sicily — between 1914 and 1920 ordinary loans to an aggregate amount of 187,386,900 liras to which must be added the amount of the special loans of which we have spoken. However, the multiplicity of the measures relating to agricultural credit and the variety of the regulations which govern the working of the

special institutions in the different regions rendered it desirable to consolidate the provisions in a single law in order to facilitate and ensure their application. On the other hand, during the War, the exigencies of agricultural production and the necessity of increasing it as much as possible and of helping the farmer to overcome the difficulties by which he was faced, compelled the Government, as we have seen, to take special measures which, though in large part provisional or affecting only particular regions, proved in their practical application to be so useful that it was thought desirable to continue them and to make them general. It seemed therefore indispensable to authorize the Government to collect together and consolidate in a single law the provisions contained in the various laws and decrees which it was thought fit to keep in force. This authorization was given by the Decree-Law of 7 March 1920, No. 312, amended by the Decree-Law of 16 January 1921, No. 50. To give as much uniformity as possible to the rules governing agricultural credit, to make them as effective as possible and to facilitate and to ensure their application, the Government was given power to extend or to make general provisions in force in particular regions or for particular institutions, or to suppress or modify them, as well as to introduce simplifications in the procedure for granting, issuing and repaying loans, and lastly to extend or make general the guarantees applicable to particular operations.

The consolidated provisions were approved by the Royal Decree of 26 June 1921, No. 1,048. They are composed of two parts, the first of which relates to the institutions carrying on agricultural credit business, credit for the provision of working capital in agriculture, credit for agricultural improvements, land credit, and the fiscal and legal exemptions and privileges. The second part relates to the agricultural credit institutions of the different regions, their organization and the business which they are empowered to carry on. These institutions are: For Liguria, the Agricultural Credit Institution for Liguria; for Venetia, the Federal Credit Institution for the Revival of Venetia; for the Marches and Umbria, the agricultural banks formed in every commune containing more than 10,000 inhabitants; for Latium, the Agricultural Credit Institution for Latium; for the Southern Provinces, the Savings Bank of the Bank of Naples and the Provincial Banks managed by it; for Basilicata, the Provincial Agricultural Credit Bank for Basilicata; for Calabria, the Victor Emmanuel III Credit Institution; for Sicily, the Agricultural Credit Section of the Bank of Sicily; for Sardinia, the Provincial Agricultural Credit Banks of Cagliari and Sassari. The last chapter relates to the Land and Agricultural Credit Section of the National Credit Institution for Co-operation.

We need not here describe the organization of agricultural credit as it results from the complex work of revising and co-ordinating the manifold provisions by which it is regulated, as in doing so we should be merely repeating a great part of what we have already said; let it suffice to note that the fundamental principles which have been more and more followed in the exceptional war measures, and on which we have laid particular stress on account of their importance as innovations, have re-

maintained, in accordance with the wishes expressed by the great majority of the farmers and as the fruit of a now long experience, definitely embodied in Italian legislation on agricultural credit.

§ 4. THE BUSINESS DONE BY THE SPECIAL AGRICULTURAL CREDIT INSTITUTIONS FROM 1914 TO 1918.

The following statistics of the business done by the special agricultural credit institutions during the war period, that is during the period in which most of the measures above described were taken, have been supplied to us by the Colonization and Agricultural Credit Department of the Ministry of Agriculture:

Business done by the Agricultural Credit Institutions working under Special Laws

Years	Inter-medial bodies at work	Rediscounts		Direct discounts		Direct loans		Total				
		Number of trans- actions	Amount	Number of trans- actions	Amount	Number of trans- actions	Amount	Number of trans- actions	Amount			
		Liras		Liras		Liras		Liras				
Savings Bank of the Bank of Naples.												
1914	245	25,150	10,933,853.	403	2,434,548	139	565,757	25,692	13,934,159			
1915	301	28,544	12,412,292	566	3,271,273	130	452,178	29,240	16,135,743			
1916(?)	274	26,183	12,694,072	627	4,018,818	15,858	8,951,680	42,648	25,664,570			
1917(?)	251	21,869	17,302,671	597	5,050,477	11,586	8,650,530	34,052	30,983,679			
1918	219	20,399	33,669,045	516	8,234,944	5,653	7,504,902	26,568	48,908,892			
Agricultural Credit Section of the Bank of Sicily.												
1914	272	38,764	9,734,464	397	3,959,619	125	52,075	39,286	13,746,159			
1915	258	45,362	9,804,550	349	2,727,102	102	116,570	45,813	12,648,222			
1916	162	24,288	5,855,565	237	1,731,495	53	314,000	24,578	7,901,060			
1917	181	15,430	4,641,124	151	1,526,449	185	1,136,059	15,775	7,393,633			
1918	170	11,728	4,371,030	142	2,048,239	167	1,313,248	12,037	7,732,518			
Federation for Agricultural Credit in Liguria (2)												
Years	Inter-medial bodies	Transactions with intermediary bodies	Direct transactions with farmers	Total amount of the transactions	Loans			Loans				
					Inter-medial bodies	for periods less than 2 years	for periods from 2 to 9 years	Total	Inter-medial bodies	for periods less than 2 years	for periods from 2 to 9 years	Total
		Liras	Liras	Liras		Liras	Liras	Liras		Liras	Liras	Liras
1914	19	156,225	—	156,225	10	46,959	27,435	74,394	9	106,826	24,000	130,826
1915	29	408,849	18,070	426,919	12	131,549	38,405	169,954	13	317,578	42,411	359,989
1916	30	711,595	47,896	759,491	13	134,575	40,295	174,870	13	248,168	32,670	280,838
1917	31	1,081,116	55,215	1,136,331	16	232,890	42,327	275,217	18	224,179	100,072	324,251
1918	40	1,720,261	55,133	1,775,395	16	296,644	71,250	367,894	18	496,083	112,861	608,945

Agricultural Credit Institution for Latium				Victor Emmanuel III Agricultural Credit Institution for Calabria							
Year	Intermediary bodies	Transac- tions with inter- mediary bodies	Amount of the transac- tions with farmers	Loans to farmers		Loans to consortia and agricultural banks		Total			
				Number of loans	Amount	Number of loans	Amount	Number of loans	Amount		
		Liras	Liras	Liras	Liras	Liras	Liras	Liras	Liras		
1914	95	7,953,514	1,274,692	9,228,211	1,487	1,368,692	8	35,000	1,495	1,403,692	
1915	98	9,102,836	1,384,536	10,487,372	1,525	1,172,074	488	138,420	2,013	1,310,494	
1916	100	7,660,134	954,435	8,614,570	1,318	1,025,565	376	183,941	1,694	1,209,507	
1917	120	9,402,151	1,458,112	10,860,264	1,076	1,166,106	420	303,844	1,496	1,469,950	
1918	117	7,907,171	2,047,281	9,954,453	704	968,105	147	579,892	851	1,547,997	
Agricultural Credit Bank for Basilicata (Situation at end of year)				"Cassa adempivole" of Cagliari (Situation at end of year)				"Cassa adempivole" of Sassari (Situation at end of year)			
Year	Advances to months frumentari (for agri- cultural banks and improve- ment)	Loans for the provision of working capital	Advances to months frumentari agricultural banks and agri- cultural consortia	Loans for agricul- tural improve- ments	Loans for the provision of working capital	Advances to months frumentari agricultural banks and agri- cultural consortia	Loans for agricul- tural improve- ments	Direct loans	Redis- counts		
										Liras	Liras
1914	758,979	1,341,233	74,790	2,597,675	209,790	306,132	856,814	368,260	835,822	747,841	
1915	918,315	1,326,080	126,746	2,967,766	622,856	363,547	874,244	511,949	999,091	867,008	
1916 (*)	3,686,251	1,288,385	234,597	2,805,404	701,594	339,285	1,229,628	533,350	1,047,027	1,049,811	
1917 (*)	4,436,670	1,317,781	777,715	2,527,233	1,450,472	302,701	1,720,274	394,682	1,277,397	1,028,779	
1918 (*)	4,338,754	1,337,584	1,160,075	2,584,191	436,749	285,833	1,658,416	123,462	1,377,313	1,074,011	

(1) To repair the damage caused by the deprecations of moles the State, under the Lieutenantcy Decrees of 27 July 1916, No. 913, and 6 May 1917, No. 737, advanced a sum of 28,000,000 liras for loans to farmers. To encourage the increase in the cultivation of cereals it afterwards formed a fund of 30,000,000 liras for loans to farmers (Lieutenantcy Decrees of 28 June 1917, No. 1,035, and 11 November 1917, No. 1,831).

(2) Business was begun on 1 August 1914.

(3) The increase in the sums advanced is due to the transactions carried out with the funds supplied by the State, to which reference is made in Note 1.

It should be noted that these statistics do not represent all the agricultural credit business done in Italy in the years 1914 to 1918, but only the transactions carried out by means of capital supplied by the central institutions; there were also the transactions carried out by the various intermediary bodies with their own funds (owned capital and deposits) and by the popular banks, the rural banks, etc., in other regions in which they do not act as intermediary bodies, as well as those carried out by the ordinary savings banks (which do a considerable agricultural credit business) and by the ordinary banking companies. Of these transactions, however, statistics are not available.

G. C.

Miscellaneous Questions relating to Agricultural Economy

ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

GREAT BRITAIN AND IRELAND.

THE MAINTENANCE OF THE SUPPLY OF AGRICULTURAL LABOUR IN ENGLAND AND WALES DURING THE WAR.

The maintenance of the supply of agricultural labour during the War in England and Wales (as in other parts of the United Kingdom) was a twofold problem. It was necessary not only to prevent the supply being so depleted by the enlistment of agricultural labourers as to render it impossible to maintain agricultural production at the pre-War level, but to provide labour for the increased cultivation which was required to assure the food supply of the country.

We find accordingly two distinct series of measures. The first of these provided for the retention of certain classes of agricultural labourers on the land by exempting them from military service or delaying their call to the Colours. The other series provided for replacing the mobilized labourers and for supplying additional labour. These measures took many forms, chief amongst which were the detachment of soldiers from military duties for work on the land and the organization on a large scale of the employment of women labourers. Many other sources of labour were also drawn upon, such as prisoners of war, Belgian refugees, and foreign immigrants, while for seasonal labour public employees, school sasters, school children and others were encouraged to volunteer their services (1).

(1) The fixing of minimum wages for agricultural labourers may also be regarded as one of the steps taken for the maintenance of the supply of agricultural labour, but as the subject was treated at length in our issue of August-September-October 1919 it will not be dealt with in this article.

With each of the different methods adopted for maintaining or replenishing the labour supply we shall deal in turn, but we must here premise that while the measures emanated principally from the War Office, the Board of Agriculture (of which a special Food Production Department was formed at the beginning of 1917), the National Service Department (created in 1916 and erected into a Ministry in 1917), and the Local Government Board, their local execution was entrusted in the main to the County War Agricultural Committees (formed towards the end of 1915), to their Executive Committees (formed at the beginning of 1917) or to their District Committees. Questions relating to the exemption of agricultural labourers from military service were dealt with by the Local Tribunals (first formed at the end of 1915) in collaboration with the Agricultural Committees or Executive Committees. Measures concerning the employment of women were for the most part carried out by the Women's War Agricultural Committees, formed in 1916.

It must also be noted that while the importance of maintaining the home production of food-stuffs was quickly recognized and efforts were made to promote it even in the first years of the War it was not until 1917 that this was done on an extensive scale. In that year the Corn Production Act was passed and a vast programme was put into execution for increasing the area of arable land. The area of arable land was, in fact, 10,998,250 acres in 1914; 10,965,710 acres in 1915; 11,051,100 acres in 1916; 11,246,110 acres in 1917 and 12,398,640 acres in 1918. For this increased cultivation additional labour was required but in 1917 and 1918 the military situation was such that there was urgent need of men. We shall see what steps were taken to reconcile these conflicting needs.

§ I. THE AGRICULTURAL LABOURER AND MILITARY SERVICE.

The mobilization of the Army and the enlistment of large numbers of men caused some difficulty to the farmers in getting in the harvest of 1914 (1). A general shortage was not, however, severely felt at once. Returns obtained by the Board of Trade showed that the number of male persons in regular employment in agriculture in January 1915 was 12.4 per cent. less than in January 1914 (2). As 15.6 per cent. of the persons employed in January 1914 had joined the naval or military forces, it was evident that the farmers had been able to fill the places of one in five of those who had joined. This had been done by employing men who had previously been casual labourers or men who were usually continuously employed in the summer, but were unemployed or did other than agricultural work in the winter.

At this time the most pressing need was for milkers, horsemen (who had been recruited in especially large numbers for the new armies) and men competent to work threshing machines.

(1) *Journal of the Board of Agriculture*, September 1914.

(2) *Journal of the Board of Agriculture*, April 1915.

In the summer of 1915 the shortage was strongly felt and instructions were issued to General Officers Commanding-in-Chief and to Officers Commanding Districts that when there was no one over recruitable age available, a working farm bailiff or foreman, a head carter, horseman, and second horseman in the case of a large farm, or waggoner, a head stockman or yardman, a shepherd, and necessary milkers (until either women, or men not of recruitable age could be trained to take their place, or other means could be provided to replace them) should not be induced to enlist, and that sufficient engine-drivers, blacksmiths and thatchers should be left, as far as possible, in every district (1).

The same concession was also made in respect of the engine drivers and mechanics employed by proprietors of steam ploughs and threshing machinery.

In the event of a difference of opinion arising between Recruiting Officers and farmers or proprietors of agricultural machinery with regard to the enlistment of special men, it was arranged that the Chairman of each Petty Sessional Division in England and Wales should select a magistrate to act as referee in cases of the kind. Particulars of the case for reference to a magistrate were to be stated on a form which would be supplied by Recruiting Officers on request. The form, when completed, was to be forwarded to the Clerk to the Petty Sessional Division concerned, who would send it to the selected magistrate and arrange a day convenient to the parties for a hearing. At the hearing only the Recruiting Officer and the employer would be permitted to attend and be heard.

At this time the National Register was being prepared with a view to ascertaining definitely what men were available for military service, but on 28 September the President of the Board of Agriculture was able to announce that he had arranged with the Secretary of State for War that, as soon as the analysis of the National Register had been completed, men of the classes of working farm bailiffs, shepherds, stockmen (including milkers), horsemen, thatchers, engine drivers, and mechanics and attendants on agricultural machinery, steam ploughs and threshing machines would not be accepted for enlistment, even if they should offer themselves (2).

In connection with the system of recruiting adopted towards the end of 1915 and usually known as Lord Derby's Recruiting Scheme, special arrangements were made to retain a sufficient number of labourers on the land (3).

Under this scheme a man who wished to join the Army might elect

(1) *Journal of the Board of Agriculture*, August 1915.

(2) Appeal by Lord Selborne to the farmers and occupiers of land in England and Wales (*Journal of the Board of Agriculture*, October 1915).

(3) Circular, dated 19 November 1915, addressed by the Local Government Board to Local Authorities. Résumé of this Circular so far as it relates to agriculture, and Statement prepared by the Board of Agriculture as to the effect on agriculture of Lord Derby's Recruiting Scheme, published in the *Journal of the Board of Agriculture*, December 1915.

to be enlisted for immediate service with the Colours or to be "attested," placed in the Reserve (Section B), grouped, and returned to his civil occupation until his group was called up for service.

There were 46 groups, 23 for single men (including widowers without children dependent upon them), each year of age constituting a separate group, and 23 similar groups for married men; the first group consisted of single men aged 18 years, the 46th of married men aged 40. Men married subsequently to 15 August 1915, the date of registration, were treated as single men. It was proposed to call up the groups for military service in the numerical order of the groups, except that men of 18 years would not be called up for service in any case until they attained the age of 19 years.

To deal with questions arising in connection with the new recruiting arrangements local authorities were invited to form committees. These committees were styled Local Tribunals and a Central Appeal Tribunal was appointed by the Government to deal with cases referred to them by the Local Tribunals.

Certain classes of skilled agricultural labourers had been "starred" in connection with the National Register, and a list of reserved occupations had been prepared which included certain occupations in trades allied to agriculture. The Army Council had issued instructions to all Recruiting Officers that starred men and men on the list of reserved occupations who wished to join the Army should not be enlisted for immediate service with the Colours. They could only be attested, grouped, and passed to the Army Reserve, and immediately sent back to their civil occupations. They would be provisionally exempted from actual service and would not be called up unless it was decided by the Central Appeal Tribunal that it was no longer necessary in the national interest for them to continue to be provisionally exempted.

Questions as to whether the occupation of a man was, in fact, a starred or a reserved occupation or whether it was necessary, in the national interest, that he should be retained in civil employment, were to be investigated by the Local Tribunals, which would report to the Central Appeal Tribunal for decision.

Where a man who was actually engaged in a starred occupation had not been starred, the man or his employer could make an application to the Local Tribunal. If the Recruiting Officer agreed to the application, the man would be treated as though he had been starred. If not, the Local Tribunal were to investigate the facts and report, with their recommendations, to the Central Appeal Tribunal.

If any "starred" man had inadvertently been enlisted for immediate service with the Colours, the employer was to write at once to the Area Commander, the War Office having promised to take all possible steps to transfer the man to the Army Reserve and send him back to his civil occupation.

In the case of a man who was not in the list of "starred" or "reserved" occupations, but who might be individually indispensable to an em-

employer's business, the employer might bring the case of any such man — if he had been attested, grouped and passed into the Reserve (but not if he had been enlisted for immediate service with the Colours) — before the Local Tribunal with a view to his being placed in a later group, but in these cases the man himself had also to state that he was willing to remain in the employer's service if a claim were allowed, and the man's consent to this was therefore made a condition precedent to any claim by the employer.

If the Recruiting Officer raised no objection to the claim, the case might be treated as decided, and the Local Tribunal would notify the employer accordingly. Failing agreement, the Local Tribunal would decide whether the man should be placed in a later group and if so in which group. It was not competent to the Local Tribunal in a case of this kind to decide that a man was to be provisionally exempted from service and not to be called up with the group in which he was placed.

The Local Tribunal could not place a man back more than 10 groups but if, when the time came to call up the group to which the man had been postponed, the circumstances continued to be such as to justify his being placed in a still later group, application to this effect might be made to the Local Tribunal by the employer or the man as the case might be.

The term "indispensable" was to be strictly interpreted. It would not be enough for the employer to show that he would be inconvenienced, even seriously inconvenienced, by the loss of the man. Speaking generally, the employer had to show not only that the man was individually indispensable, but also that every effort had been made to obtain a temporary substitute for him, and that the employer had given reasonable facilities for men in his employment to enlist.

Farmers themselves, in common with other employers, had not been starved, but as it was essential from the national point of view that there should be someone on each farm to direct the business and ensure the proper cultivation of the land, the President of the Board of Agriculture urged farmers of military age who desired to join the Army not to enlist for immediate service with the Colours, but to be attested and grouped in Section B, Army Reserve. If a farmer remained on his farm, it was thought that it should be possible for him in most cases to release his son for military service, unless that son were really indispensable to the cultivation of the farm owing to the enlistment of the skilled labourers.

If a skilled agricultural labourer who had been "starved" as such left his employment on the farm in order to take up other work not connected with agriculture, the "starring" of that man ceased to be operative (1).

It was officially announced on 17 December 1915 that against the names of men "starved," men authorized to wear a war work badge issued by the Government, and men actually engaged in a reserved occupation a mark was placed in the Army Register (2). Owing to the pres-

(1) *Journal of the Board of Agriculture*, December 1915.

(2) *Journal of the Board of Agriculture*, January 1916.

sure in recruiting offices, however, it was thought that in some cases the mark might have been omitted. If any man in the categories mentioned received a notice calling him up for service, he was at once to see his employer, who should forward the notice forthwith to the Recruiting Officer who issued it, together with a certificate signed by the employer, stating the precise occupation in which the man was actually engaged, and the name, address and business of the firm by which he was employed.

On receipt of these particulars the Recruiting Officer would provisionally cancel the notice calling up the man, and, if on investigation it was found that the statements made by the employer were correct, a mark would be placed in the Army Register against the name of the man. If the Recruiting Officer had reason to doubt whether the man was entitled to have a mark placed against his name, he would take steps to have the matter investigated.

War Agricultural Committees and their District Committees had not at this time the right to appear before the Local Tribunals, but they could bring to the notice of those Tribunals in writing any facts which they might consider of importance bearing on cases connected with the starring of skilled agricultural labourers, the indispensability of particular employees, etc. (1).

Under the Military Service Act 1916 all men were on the appointed date (2 March 1916) deemed to have been enlisted and to have been passed to the Reserve who:—

1. Were ordinarily resident in Great Britain on 15 August 1915, or had become or thereafter became ordinarily resident in Great Britain after that date;

2. Had attained the age of 18 years on 15 August 1915 and had not attained the age of 41 before 2 March 1916;

3. Were on 2 November 1915 single or were widowers without children dependent on them, subject to certain exceptions, amongst which were:—

- (a) members of the Regular or Reserve Forces.

- (b) men who had left or been discharged from the naval or military service of the Crown in consequence of disablement or ill-health.

- (c) men who had offered themselves for enlistment and had been rejected since 14 August 1915.

The Act did not apply to men who voluntarily attested under Lord Derby's Scheme in Section B, Army Reserve. Under Section 2, Sub-section 2 of the Act, Government Departments were empowered to certify that men engaged in certain occupations (known as "certified occupations") might be exempted on the ground that the work of such men was work of national importance. The agricultural occupations which were so certified by the Board of Agriculture were as follows (2):—

(1) Circular Letter, dated 29 December 1915, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, January 1916).

(2) Notice to Farmers issued by the Board of Agriculture (*Journal of the Board of Agriculture*, February 1916).

Agricultural Enginemmen and Mechanics. — Agricultural machinery, steam ploughs and threshing machines: Attendant, driver, mechanic

Farm Workers. — Farm bailiff, foreman, grieve, steward.

Farm beastman, byreman, cattleman, stockman, yardman.

Farm carter, horseman, ploughman, teamster, wagoner.

Farm hind (if foreman or ploughman).

Farm servant (if foreman or ploughman) (Scotland).

Farm shepherd.

Thatcher.

Farmers and Market Gardeners. — Farmer (including market gardener and fruit farmer) provided that:—

(a) Farming was his sole occupation, and his personal labour or superintendence was indispensable for the proper cultivation of his holding; or

(b) If he were partly occupied in another occupation and his personal labour or superintendence was indispensable for the proper cultivation of his holding, and such cultivation was expedient in the national interest.

Foreman in all departments of hop, fruit or market gardens.

Stud Attendants. — Stallion man (a man who looks after and travels a stallion). Stud groom (Scotland).

These "certified occupations" were the same as those previously known as "starred" or "reserved" occupations, with some additions and revisions, notably the addition of "Farmer (including market gardener and fruit farmer)".

The only persons entitled to be exempted were those whose principal and usual occupation was one of the certified occupations.

Applications for exemption were to be made to the Local Tribunal, but the military representative might object to a certificate of exemption being granted on the grounds that:—

(a) The man's principal and usual occupation was not in fact one of the "certified occupations", or that

(b) Notwithstanding that the man's principal and usual occupation was one of the "certified occupations" it was no longer necessary in the national interest that he should continue in civil employment.

An application for a certificate of exemption might also be made by or in respect of a man who was not engaged in a "certified occupation", on the ground that it was expedient in the national interest that the man should, instead of being employed in military service, be engaged in other work in which he was habitually engaged or in which he wished to be engaged; that, if he were being educated or trained for any work, it was expedient that he should continue to be so educated or trained; that serious hardship would ensue if the man were called up for Army service owing to his exceptional financial or business obligations or domestic position; on the ground of ill health or infirmity; on the ground of a conscientious objection to the undertaking of combatant service.

The Act did not apply to men who had attested voluntarily under

Lord Derby's Scheme, but it was provided that a voluntarily attested man whose principal and usual occupation was one of the "certified occupations", might go to the local military representative and claim that he should not be called up for military service. If the military representative agreed, the necessary steps would be taken by the military authorities to secure that the man was not called up so long as the exemption continued, but if the military representative disagreed application might be made to the Local Tribunal, who would decide the case.

As it was certain that the military authorities would claim for the Army all men liable to military service who were not absolutely essential on any particular farm the Board of Agriculture asked the War Agricultural Committees to consider the possibility of initiating some scheme for a redistribution of agricultural labour (1). There were districts in which some farms were still carrying practically their ordinary staff, while in other cases the labour had been so depleted as to render it almost impossible to carry on the cultivation of the farms. It was recognized that any such scheme must be voluntary, but it was in the interests of the farmers, as well as of home food production, that there should be a redistribution of the available labour.

It soon became necessary to make a careful revision of the list of certified occupations in order to insure that as many as possible of the young unmarried men who could be spared without serious detriment to essential national services should be released for service in the Army (2).

In view of the evidence which had reached the Government that in certain cases the number of men of military age who were being retained on the land was greater than was absolutely essential if full use were made of the services of older men, women and other sources of labour, it was decided from and after 1 May 1916, to apply a closer scrutiny to the cases of unmarried men who were farm bailiffs, foremen, grieves and stewards if they were under 30 years of age, and to all other unmarried men who were under 25 years of age. It was not proposed to alter the existing arrangement so far as it related to the farmers themselves and to the small holders who were included within the definition "farmer (including market gardener and fruit farmer)".

It was also decided that no single man of military age should continue to be regarded as engaged in a certified occupation unless he had held his post, or one of similar character with another employer, previous to 15 August 1915.

The effect of these modifications would be that instead of there being a presumption that the men concerned could receive certificates of exemption from military service, unless objection were made by the military representative, the duty of showing that the men were absolutely indis-

(1) Circular Letter, dated 17 March 1916, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, April 1916).

(2) Circular Letter, dated 25 March 1916, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, April 1916).

pensable for the cultivation of the farm or the maintenance of the head of live stock would be thrown on the farmers, and they would have to satisfy the Local Tribunals in each particular case that it was in the national interest that the men should continue in their civil employment.

Arrangements were made at this time for the appointment of representatives of the Board of Agriculture who would be authorized to appear before the Appeal Tribunals and the Board of Agriculture requested the War Agricultural Committees to take immediate steps, through the District Committees or otherwise, to nominate prominent agriculturists to represent the Board before each Local Tribunal.

The revised list of certified agricultural occupations was issued by the Board of Agriculture on 19 April 1916 (1). The men who ceased to be included in the list of Certified Occupations were as follows:—

(a) Farm bailiff, foreman, grieve, steward. *Unmarried men under the age of 30.*

Farm beastman, byreman, cattlemán,
stockman, yardman.

Farm carter, horseman, ploughman,
teamster, wagoner.

Farm hind (if foreman or ploughman).

Farm servant (if foreman or ploughman).

Scotland.

Unmarried men under the age of 25.

Foreman in hop, fruit or market garden. *Unmarried men under the age of 25.*

(b) Men who were not engaged in the same occupation on or before 15 August 1915 as that in which they were now engaged.

As a result a certificate of exemption given to any man within those classes on the ground that he was engaged in a certified occupation would automatically cease to be in force on 1 May, no matter what period of exemption had been granted previously by a Tribunal. If, therefore, his employer thought it necessary to retain his services, he would have to apply to the Local Tribunal for a renewal of the certificate of exemption, on the ground that his services were still indispensable.

Early in the autumn of 1916 the Army Council addressed a letter to General Officers Commanding in Chief, Districts, and to Officers Commanding Recruiting Areas in which it was stated that in order to maintain the production of food supplies, to allow of the autumn cultivation, and generally to review the agricultural situation, it had been agreed that, subject to any decision of the Man-Power Board, and subject to any revision which developments of the military situation and further information in regard to the agricultural situation might demand, no more men from among those employed in agriculture would, until 1 January 1917, and, in the case of men whose whole time employment on a holding was necessary for maintaining milk production, until April 1917, be called to the Colours,

(1) *Journal of the Board of Agriculture*, May 1916.

except in return for men released from the Colours for work at agriculture (1).

Prior to these dates, however, direct substitution of men not fit for general service who were with the Colours would be made for men fit for service who were still in civil life, but cases would occur where it was more in the national interest to call up a man employed in agriculture from one place, and to send from the Colours a man not fit for general service to work at agriculture in another.

To this general agreement the cases of certain men who had been refused exemption by the Tribunals, but who, at the urgent request of the President of the Board of Agriculture had been allowed to remain for a further stated period in civil life for agricultural work, would be treated as exceptions, and their retention in civil employment was to be considered by local military authorities together with the representative of the Board of Agriculture on the County Appeal Tribunal.

A scale of labour had been agreed upon between the Army Council and the Board of Agriculture as desirable to retain on farms. This scale was:—

One skilled able-bodied man or lad (wherever possible not of military age) for each of the following:—

each team of horses required to cultivate the land;

every 20 cows in milk, when the assistance of women or boys was available;

every 50 head of stall or yard stock, when auxiliary feeding was resorted to and the assistance of women or boys was available;

every 200 sheep, exclusive of lambs, grazed on enclosed lands;

every 800 sheep running on mountain or hill pasturage.

It was not intended that this scale should be undeviatingly followed, nor did it embrace all descriptions of men employed on the land; it was circulated merely to afford guidance as to the number of certain classes of men who were required to preserve the farming industry.

In connection with the arrangement above outlined Officers Commanding Units at home were instructed to prepare lists of men who before enlistment were engaged in agriculture and who could be transferred to the Army Reserve and returned to their agricultural occupation, in order to release younger men who were fit for general service in the field (2). The Officers Commanding would appoint a Military Substitution Officer for each area, and a representative of agriculture was to be appointed to co-operate with him. Wherever possible, the representative of the Board of Agriculture before the Appeal Tribunal was to be the Agricultural Representative for dealing with substitution cases, but if he could not undertake the duty, the Chairman of the War Agricultural Committee in consultation, if necessary, with the Committee was to nominate another person or other persons for the purpose.

¹ (1) Circular Letter, dated 5 October 1916 addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, October 1916).

(2) Circular Letter, dated 9 November 1916, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, December 1916).

The employer would be approached by the Substitution Officer with a view to ascertaining whether he was employing any man fit for general service. If he were, a substitute was to be offered, selected from men who, before enlistment, were employed in agriculture, and, if possible a man who was employed with that employer or in the same parish. If the proposed substitution were agreed upon, the War Office would take steps to place the substitute on the farm. If it were not agreed to, the Substitution Officer was to consult with the Agricultural Representative and if the farmer were unwilling to agree to the substitution on grounds which appeared to the Substitution Officer and the Agricultural Representative to be unreasonable, the certificate of exemption held by the man fit for general service still employed by the farmer was to be reviewed, and the fact that a substitute had been offered and refused was to be brought to the notice of the Tribunal.

If a man who had been transferred to the Reserve for the purpose of working at agriculture should leave the occupation to which he had been assigned he was, as a rule, to be called up for service with the Colours again and would not be allowed to take up other employment without the consent of the military authorities.

Area Commanders and Agricultural Representatives were to satisfy themselves that the wages to be paid to the substitutes were fair and in accordance with the rates ruling in the district.

All differences arising between farmers and substitutes were to be dealt with by the Area Commander in consultation, if necessary, with the Agricultural Representative and if a substitute left a farmer who had treated him well another substitute was to be provided if the farmer applied for one.

Before the end of 1916, the War Office obtained, by means of a Census Form, particulars of the labour employed on farms, together with information as to the cropping and stock, and of the men formerly employed who had joined the Army since the outbreak of the War (1).

The forms were left on all occupiers of five acres of land and upwards, and were distributed and collected by the police. They were filled up in duplicate, one copy being sent by the police direct to the War Office, where the information was tabulated and summarized. The other copy was sent to the Officer Commanding the recruiting area in which the farm was situated. These latter forms were scrutinized by committees set up in each area and a report was attached to each form stating whether, having regard to the scale of labour agreed upon, together with a knowledge of local conditions, it was considered that the labour available was (a) sufficient, (b) excessive, (c) deficient. In cases where the labour on the holding was considered either excessive or deficient, the particular deficiency or excess was to be stated, e. g., ploughman, carter, general labourer.

Agriculturists were represented on the committees undertaking the scrutiny. Arrangements for appointing suitable persons were made by the

11) *Journal of the Board of Agriculture*, December 1916.

representatives of the Board of Agriculture before the Appeal Tribunal, in conjunction with the War Agricultural Committees.

The Agricultural Census disclosed that there was an unnecessarily strong complement of agricultural labourers in some parts of England and Wales, but that other farming districts had too few men left to secure that increase in food production which was desirable in the national interest (1).

However as a result of representations made to them by the Board of Agriculture and to enable a complete review of the situation as regards agricultural labour to be made in the light of the information disclosed by the analysis of the Agricultural Census, the Army Council agreed that a further short period of delay would be allowed in calling up men from agriculture. This would be effected by granting leave to all agricultural workers who were due to report on 1 January 1917, until such time as they received further instructions to join.

The urgent necessities of the military situation in January 1917 made it necessary to call up half of the 60,000 men engaged in agriculture to whom the tribunals had refused certificates of exemption (2). It was agreed, however, that beyond 30,000 men, no more men would be taken from agriculture without the express approval and sanction of the War Cabinet.

In order to make good the loss of 30,000 men, the military authorities arranged to replace them by a corresponding number of substitutes. The men would not necessarily be skilled agriculturists, but a considerable proportion would be men skilled in the management of horses. Efforts would also be made by the War Office to supply as many more men as from time to time they might have at their disposal from C3 men or other sources.

Recruiting officers were instructed to consult the representatives of the County War Agricultural Executive Committees in order to decide which men were to be called up for service in each recruiting area and sub-area (3).

Subject to the exigencies of the military situation, no more Class B or Class C men were to be taken from agriculture, and if a man, on medical examination, was placed in either of those classes he would not be called up, or if he had been called up since 12 January 1917, his notice would be cancelled and he would be returned to his civil occupation.

Where a farmer had on his farm only the amount of male labour set out in the agreed scale, it was arranged that the position of his employees

(1) Notice issued by the War Office on 21 December 1916, quoted in Memorandum, dated 22 December 1916, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, January 1917).

(2) Notice to Farmers issued by the Board of Agriculture on 16 January 1917 and Letter to the Press signed by the Secretary of State for War and the President of the Board of Agriculture and issued on 24 January 1917 (*Journal of the Board of Agriculture*, February 1917).

(3) Memorandum, dated 28 February 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, March 1917).

with regard to their liability to military service should not be affected in any way by the number of women a farmer might employ. Women labour was not to be regarded as in substitution for male labour, but to be supplementary only.

The list of agricultural certified operations was again revised and the following amended list was issued on 20 March 1917 (1): —

Farmer (including Market Gardener and Fruit Farmer). — Provided that —

(a) farming is his sole occupation and his personal labour or superintendence is indispensable for the proper cultivation of his holding ;

(b) if he is partly occupied in another occupation, his personal labour or superintendence is indispensable for the proper cultivation of his holding and such cultivation is expedient in the national interest.

Agricultural machinery, steam ploughs and threshing machines: Attendant, driver, mechanic.

Farm bailiff, foreman, grieve, steward (*Unmarried men up to the age of 30 not covered by list*).

Farm beastman, byreman, cattleman, teamster, waggoner

Farm carter, horseman, ploughman, teamster, waggoner

Farm hind (if foreman or ploughman).

Shepherd.

Thatcher.

Stallion man (a man who looks after and travels a stallion).

Hop, fruit and market gardens — Foreman (*Unmarried men up to the age of 25 not covered by list*).

Seed growing industry: Head of department, seed expert (*Unmarried men up to the age of 30 and married men up to the age of 25 not covered by list*)

Forest-tree nurseries: Seed expert (*Unmarried men up to the age of 41 and married men up to the age of 31 not covered by list*).

In view of the importance of maintaining a supply of agricultural seeds it was urged that farmers growing agricultural seeds in bulk for seedsmen should receive special consideration from the Tribunals with regard to the trained men required for the purpose.

Age meant age of the man on 1 May 1916. A man under the age limits stated in the list, if found on examination by a Recruiting Medical Board, before his case had been decided by a Tribunal, not to be fit for General Service (Category A) or for Garrison Duty Abroad (Category B), was entitled to be treated as engaged in a certified occupation.

Unmarried men in any of the occupations included in the list were covered only if they could show that they were engaged in the same

(1) Notice issued by the Food Production Department of the Board of Agriculture on 20 March 1917. (*Journal of the Board of Agriculture*, April 1917).

occupation on or before the date when the National Register was made, namely 15 August 1915.

Men who on 2 November 1915 were unmarried or were widowers without any child dependent on them were to be treated as unmarried men for the purpose of the list.

The Military Service (Review of Exemptions) Act, 1917, which received the Royal Assent on 5 April 1917, gave the Army Council power to call up for examination the following three classes of men excepted from the operation of the Military Service Acts, 1916, as being —

(a) a member of the territorial force, who is, in the opinion of the Army Council, not suited for foreign service; and

(b) a man who had left or been discharged from the naval or military service of the Crown in consequence of disablement or ill-health; and

(c) a man who had been previously rejected on any ground, either after offering himself for enlistment or after becoming subject to the Military Service Acts, 1916.

These general powers did not, however, extend to any man who was for the time being engaged in agriculture and whose work was certified by the Board of Agriculture to be work of national importance and who was engaged on such work on 31 March 1917.

Although the local military authorities had lists in their possession as regards each area showing the men who were brought within the general provisions of the Act, they had no precise information as to which men were working on the land (1).

It was, therefore, necessary to send a notice to every man who came within the general provisions. If a man engaged in agriculture received the notice, and claimed that he was not liable to have the notice sent to him, the procedure was to complete the certificate on the back of the notice and return it to the Recruiting Officer. The military authorities then sent to each County War Executive Committee full particulars of the men in the county who claimed to be exempted from the Act on the ground that they were employed in agriculture on 31 March 1917 and that their work was of national importance. The Committee ascertained whether each individual man was so employed and if they were satisfied that he ought to be exempted they issued a certificate that he was exempted from the provisions of the Act. If the Recruiting Officer objected in any individual case to the decision of the Executive Committee, he sent particulars to the War Office, who referred the matter to the Food Production Department.

No hard and fast rules were laid down for the guidance of the Committee as regards the particular agricultural occupations which were of national importance.

(1) Memorandum, dated 28 April 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, May 1917).

A deputation from the Federation of War Agricultural Committees in England and Wales waited upon the Prime Minister on 2 April 1917 and as a result of this deputation and of an agreement arrived at between the Army Council and the Federation, the whole question of agriculture and recruiting was re-considered by the War Office and the Food Production Department (1).

Previous arrangements of a general character were cancelled and as regards men employed in agriculture who had been refused exemption by the Tribunals, the following procedure was arranged. Where the man was employed on a farm, not being the farmer himself or the manager of the holding, and the Agricultural Representative appointed by the Executive Committee considered that if the man were taken for military service the labour on the farm would be unduly depleted, the Representative was to bring the case at once to the notice of the Executive Committee, with a view to their arranging for the provision of a substitute, either from an agricultural company, by the transfer of a farm worker classified B or C as regards military service and employed on a farm where there was excess of labour, from the National Service Volunteers, or otherwise. At the same time the Agricultural Representative was to notify the Recruiting Officer concerned, or (if he were not aware which Recruiting Officer was concerned) the Officer Commanding the Recruiting Area, of his opinion and the action taken. The Recruiting Officer or the Area Commander would then arrange for the man's calling-up notice to be suspended to enable a substitute to be provided, but if the substitute were not provided within a period of three weeks from the date of the Representative's notification the man would be called up for service with the Colours.

If, however, the man in question were the farmer or was, in effect, the manager of the holding, and were required to maintain the production of food upon it, the Agricultural Representative was at once to notify the Executive Committee, who, if they were satisfied that the man's presence on the farm was indispensable, were to notify the Area Commander to this effect; if he agreed with the opinion of the Executive Committee, the Area Commander was required to submit full particulars of the case to the War Office and in the meanwhile the calling-up notice would be suspended.

To cope with the work involved by the new arrangements, the Food Production Department urged the Agricultural Executive Committees to make arrangements for the appointment of Representatives to act as assistants to the Committee's Chief Representative, and it was suggested that the Representatives of the Board of Agriculture before the Local Tribunals should be utilized as the local agents of the Executive Committee.

It was subsequently agreed that no men who had been on 1 July and still were employed whole time on a farm on farm work of national impor-

(1) Memorandum, dated 5 May 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, June 1917).

tance would be posted for service with the Colours, or called up for medical examination or re-examination, except with the consent of the Agricultural Executive Committee, even though a substitute might have been provided or offered (1).

The description "employed whole time on a farm on farm work" covered men employed in agriculture as thatchers, drivers of engines or motor tractors (including tractor ploughmen), and market gardeners whose whole time employed in producing food of a character and amount to constitute national importance. The description did not include work on a poultry farm or a market garden for the production of flowers or of fruit.

The procedure to be followed depended upon whether the men's cases had been finally disposed of by the Tribunals or not. In the former case, if the Recruiting Officer knew that the man came within the agreement and that the Executive Committee would not consent to his being called up, no action was to be taken, and the man was to be allowed to remain in his civil occupation. If the Recruiting Officer was in doubt he was to refer the case to the Agricultural Executive Committee.

Where a man held an absolute or conditional certificate of exemption, his case was to be referred by the local military authorities to the County Agricultural Executive Committee, and if he was a man to whose calling up the Committee would not be prepared to consent, and to whom they would be prepared to issue a voucher that he came within the agreement, no application for the withdrawal of the certificate was to be lodged with the Tribunal.

Although men covered by the agreement who held temporary certificates of exemption or who had not yet made application to the Tribunals were not liable to be posted for service with the Colours, even if they did not apply for certificates of exemption or for the renewal of a certificate of exemption, such men were recommended in their own interest to apply to the Tribunals for formal certificates of exemption or for renewals thereof.

If the recruiting officer objected in any individual case to the decision of the Agricultural Executive Committee, he was to send particulars to the War Office, who would refer the matter to the Food Production Department of the Board of Agriculture.

The effect of the agreement was that no man whole-time employed on a farm on farm-work could be removed from his civil occupation without the consent of the Agricultural Executive Committee. It was, however, the duty of the Committee to notify the military authorities that a particular man was not entitled to the benefit of the agreement in the following circumstances:—

1. If the Committee were satisfied that the man's work was not of national importance;

(1) Memorandum, dated 18 July 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, August 1917).

2. Where the man was employed on a farm on which there was an excess of labour, unless (a) within three weeks from the date on which the case was referred to the Committee they had specified a farm to which the man was to move within three weeks of the date of the Committee's notification to the man, and (b) the Committee were satisfied that the man would move as directed. If the man did not move within the time specified, the Committee was to notify the recruiting officer that he was not entitled to the benefit of the agreement.

Doubt having arisen as to the meaning of the statement that the expression "whole time employed on a farm on farm work" did not include work on a market garden for the production of flowers or fruit, it was explained by the Food Production Department that the word "fruit" was intended to include only luxury fruit, such as grapes, peaches, etc. (1).

If the market garden on which a man was employed were mainly utilized for producing vegetables and other crops of an amount and character to constitute national importance, the fact that a portion of the garden was devoted to fruit suitable for jam, or that part of the holding was an orchard, did not take the man out of the arrangement applicable to men employed whole-time on a farm on farm work provided that the whole time of the individual whose case was under consideration was devoted to the cultivation of the part of the garden which produced crops of national importance. Agricultural Executive Committees might also issue vouchers that they came within the agreement to particular individuals whole-time engaged on large farms in producing fruit for jam.

In consequence of the passing of the Military Service Act, 1918, which received the Royal Assent on 6 February 1918, it became necessary to issue fresh regulations and instructions (2).

So far as they effected men engaged in agriculture and allied trades the alterations made in the regulations and instructions related to the periods within which both attested and unattested men, whose certificates of exemption had ceased to be in force, might apply for the renewal of their exemptions.

No change was made in the case of men whose certificates had ceased to be in force before 11 March 1918, but as regards both unattested and attested men whose certificates ceased to be in force after 11 March 1918, an application for renewal might be made before or within seven days after the date on which the certificate ceased to be in force.

In April 1918 the need of the Army for men became urgent and arrangements were made with a view to releasing a number of men fit for general

(1) Memorandum, dated 17 September 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, October 1917).

(2) Memorandum, dated 25 March 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, April 1918).

service without depleting the man-power of any farm (1). The Agricultural Executive Committees were asked to indicate the individual men whom they would be prepared to release for military service upon the provision of substitutes. They would have ample opportunity of satisfying themselves that the substitutes offered were suitable and consequently that the amount of skilled labour of farms would be safeguarded.

On 20 April 1918 an Order was issued as a Royal Proclamation under Section 3 of the Military Service (No. 2) Act, 1918, withdrawing certain certificates of exemption from military service (2). In so far as agriculture and the allied trades were concerned, the effect of the Proclamation was to withdraw the certificates of exemption granted or renewed to men born in the years 1895, 1896, 1897, 1898 and 1899, who had been classified in Medical Grade 1 or Category A, or who had not been medically graded or classified. It was, however, provided that application might be made to an Appeal Tribunal for the grant or renewal of a certificate of exemption in respect of a man who had established to the satisfaction of the County Agricultural Committee that he was a highly skilled agricultural worker, whole-time employed on a farm in farm work, and that he was irreplaceable and essential to the cultivation of the farm. Such application was to be lodged not later than 15 May 1918.

For dealing with agricultural cases the Local Government Board recommended the Tribunals first to go through them with the National Service Representative and the Agricultural Representative (3).

A small committee or committees of three to five members would be best for this purpose. It would probably be found that in some cases exemption might be given, with the concurrence of the National Service Representative without a hearing. In those cases which it was found necessary to hear, notice of hearing was to be issued forthwith.

At the same time the Food Production Department of the Board of Agriculture urged Agricultural Executive Committees to ascertain at once the names of the men falling within the terms of the Proclamation and to send forms of application for leave to appeal for their exemption to the farmers employing such men (4). They were then to arrange for special meetings to consider applications received from employers.

Instructions were subsequently issued by the Ministry of National Service that recruiting authorities might use their discretion as to the posting of makers, erectors or repairers of agricultural implements, tractors, steam ploughs or threshing machines, and attendants, drivers or mechanics

(1) Memorandum, dated 15 April 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, May 1918).

(2) *Journal of the Board of Agriculture*, May 1918.

(3) Circular Letter, dated 23 April 1918, issued by the Local Government Board (*Journal of the Board of Agriculture*, May 1918).

(4) Circular Letter, dated 26 April 1918, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, May 1918).

employed thereon, whether they came within the ages covered by the Royal Proclamation of 20 April or not, bearing in mind the need for men for the Army and the importance of food production (1). This enabled recruiting authorities to suspend the calling up of men of the ages and grades or medical categories affected, with a view to allowing time for substitution in urgent cases submitted by Executive Committees.

The Food Production Department laid particular stress on the importance of retaining the labour engaged in connection with steam tackle (2). Such labour was highly skilled and for the time being irreplaceable, so that any further reduction would entail the laying up of sets of tackle.

At a later date a special arrangement was made whereby, in view of the importance attached by the War Office to the maintenance of the light horse breeding industry, provisional vouchers certifying that they were engaged in an occupation of national importance might be issued by Agricultural Executive Committees to stud employees (3).

Further to meet the requirements of the military situation an arrangement was made by the Board of Agriculture with the Ministry of National Service and the War Office for 30,000 Grade I men to be made available from agriculture for military service not later than 30 June 1918 (4).

It was hoped that the large majority of these men would be recruited under the Proclamation of 19 April 1918, calling up men born in the years 1895-1899, but if the full number of men were not obtained under this Proclamation, it would be necessary to obtain the remainder from men up to 31 years of age.

It was expected that additional labour, including a large number of prisoners of war, would be made available for agriculture to take the place of the men urgently required for immediate military service.

It was subsequently arranged, however, that of the 30,000 men taken from agriculture 9,000 were to be left until after the harvest (5). Assurance was also given that no more "keymen" would be withdrawn from agriculture, subject to unexpected need arising for the Army, and that the "keymen" included in the 9,000 men to be left until after harvest would not be taken (6).

In September 1918 an agreement was made between the Food Produc-

(1) Telegram issued by the Ministry of National Service, 13 May 1918. Memorandum, dated 17 May 1918, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, June 1918).

(2) Memorandum, dated 5 June 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, June 1918).

(3) Memorandum, dated 8 August 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, September 1918).

(4) *Journal of the Board of Agriculture*, May 1918.

(5) *Journal of the Board of Agriculture*, August 1918.

(6) Reply by Lord Clinton, Joint Parliamentary Secretary to the Board of Agriculture, to a Question in the House of Lords, on 8 August 1918. (*Journal of the Board of Agriculture*, August 1918).

tion Department of the Board of Agriculture, the Local Government Board and the Ministry of National Service that men principally and usually engaged throughout the year in the following occupations, provided they were so occupied on 28 May 1918, should be entitled to receive vouchers from Agricultural Executive Committees (1) :—

- (a) Rabbit-catchers, rat and mole-catchers, vermin-killers.
- (b) Hedgers, ditchers and drainers.
- (c) Men wholly employed on individual agricultural estates in the following occupations :—

Agricultural masons, bricklayers, carpenters, joiners, slaters and men engaged in fencing or in making walls or gates.

- (d) Men engaged in looking after machinery for pumping-stations, etc., on agricultural estates.

- (e) Sheep-dippers, shearers and drovers.
- (f) Men wholly engaged in willow-farming and withy growing.
- (g) Managers of sets of threshing-tackle.
- (h) Men engaged in flax cultivation.
- (i) Auctioneers and valuers engaged as land and estate agents, whose services were considered by the Agricultural Executive Committee as being essential for the purpose of carrying on work connected with agriculture and production.

It was further agreed that agricultural vouchers issued to men wholly engaged in the breeding of horses, whether heavy or light, would not be objected to by National Service Representatives.

On the other hand it was agreed that the following classes should not be entitled to agricultural vouchers and that any vouchers issued to them should be withdrawn :

- (a) Estate foresters and woodmen.
- (b) Private gardeners.
- (c) Men engaged in lime burning for agricultural purposes.
- (d) Poultry farmers.
- (e) Milk recorders, nicotine recorders, members of Agricultural Wages Boards, and sack contractors.
- (f) Heads of departments and experts in retail seed firms.

These classes were to have been variously dealt with. Estate foresters and woodmen of certain ages and grades, for example, were included in a new list of certified occupations which was being prepared.

At about the same time instructions were issued to Tribunals that in view of the importance, as a part of the general policy of food production, of maintaining the kitchen gardens of private households, exemption was not generally to be refused to an experienced kitchen gardener whose exemption was found to be essential for the production of large quantities of necessary food supplies.

(1) Memorandum, dated 17 September 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, October 1918).

With the cessation of hostilities on 11 November 1918 recruiting came to and end and as soon as possible arrangements were made for the demobilization of agriculturists.

The first to be released were the so-called "key-men". Within a week from the date of the armistice some of these men were on their way back to their farms (1). At the same time arrangements were made for the immediate release of the men who had recently been called up and who were still in the country.

Up to 12 February 54,000 agriculturists had been demobilized (2). These included the so-called "pivotal," "contract" and "slip" men. The Board of Agriculture had submitted to the Department of Demobilization the names of 30,000 men for early release from the Colours as "pivotal" men in agriculture. The "contract" men were those who had been in a farmer's employment on or before 4 August 1914 and whom he desired again to employ. The "slip" men were men whom a farmer was ready to employ immediately they were demobilized, but who had not been in his employment before the War.

As demobilization proceeded the labour shortage became less and less acute and though for the harvest of 1919 it was still necessary to make special efforts to obtain the required labourers, towards the end of that year there was found to be no great deficiency in the supply. J. K. M.

(To be continued).

(1) Reply of the President of the Board of Agriculture to a Question in the House of Commons, 18 November 1918 (*Journal of the Board of Agriculture*, December 1918)

(2) *Journal of the Board of Agriculture*, February 1919.

MISCELLANEOUS INFORMATION RELATING TO THE ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

DENMARK.

THE FOLK HIGH SCHOOLS. — REPORT OF THE RECESS COMMITTEE ON THE ESTABLISHMENT OF A DEPARTMENT OF AGRICULTURE AND INDUSTRIES FOR IRELAND. Dublin, 1906. — FOGHT (W. Harold): The Folk High School (*U. S. Bureau of Education. Bulletin No. 22*) 1914. — HARVEY (William J.) and RIPPEN (Christian): Denmark and the Danes. London, 1916. — HOWE (Frederic C.): Denmark, a Co-operative Commonwealth. New York, 1921. — APPEL (Hans): Højskoler, in the LANDBRUGETS ORDBOG (*Dictionary of Agriculture*) (in course of publication). Copenhagen, 1921. — LANDØKONOMISK AARBØG FOR 1921 (*Yearbook of Rural Economy*). Copenhagen, 1921. — STATISTIK AARBØG, 1921. (*Statistical Yearbook*). Copenhagen, 1921.

It has often been asked, and not without the expression of some surprise, how it came about that the rural population of Denmark, who were for nearly 50 years as obstinately opposed as that of any other coun-

try to any innovation in methods of cultivation, now welcomes every new idea, unanimously employs the most improved methods, and puts into practice every form of co-operation. Those who have gone into the matter are all in agreement in placing the credit of the change of attitude to the "Folk High Schools," which owe their inception to the inspiration of Grundtvig (1783-1872).

In 1828, Grundtvig was obliged to discard the dress of a pastor, and to go to London, where he was vividly impressed by the active practical life of the English, their devotion to physical exercise, their deeply-rooted feeling for personal independence, and the excellence of their educational methods viewed as a means for the moral training of young people. In 1832, he published his ideas on national educational reform, protesting against the education which the upper classes were receiving under the influence of Germany and of France. He stated that three quarters of the intellectual classes hardly knew how to write Danish, that they knew nothing of their national history, and that their education only consisted in a collection of barren facts, accumulated in view of some examination. As he proclaimed twelve years later in the hearing of thousands of citizens, he for his part felt "that the essential task was to arouse once more the soul of the people, and for that purpose to reawaken their religious and patriotic sentiments: that no beauty was too sublime for the people: that the very springs of intellectual and moral life must be brought within their reach: that it was essential to establish in a new type of school a living, effective, and national education."

Grundtvig was an idealist and it was left to others to translate his theories into practice. Several years had to elapse before one of his admirers, a village artisan, Christian Kold, opened the first folk-school, that of Rødning (1844). The teaching was essentially oral, so that the school depended absolutely on the personality of the master. In consequence, failures were not uncommon on the other hand, there was evidence of success given in an irresistible impulse towards expansion.

Usually a beginning is made in rented premises, but if success is assured, the school soon has its own premises. The school fees paid by the students cover the cost of the premises and the fittings, as well as the master's salary. The local school inspectorate, however, in conjunction with the Council of the Commune, can grant scholarships in favour of promising students of slender means. In 1913-14 a sum of 520,000 crowns figured under this heading in the State budget. In 1920, each school recognized by the State could demand an annual grant in aid of 500 crowns, and, if required, a special allocation for the establishment of scholarships and purchase of material. The total grant in aid that the State can give to one school cannot, however, exceed 2,500 crowns a year. Taken altogether, the State grants in aid may not exceed 160,000 crowns a year.

These figures may seem insignificant, but the schools themselves, with a strong sense of independence, do not ask for more. Their feeling against examinations is no less marked, and they would prefer to give up any claim to subsidies rather than establish examinations and thereby

kill study. As regards the instruction, it is above all based on the cultivation of religious and patriotic sentiments, and as, according to Grundtvig, the age most amenable to this cultural influence is between 18 and 30 years, it is for young men and women of that age that the schools are first and foremost intended.

The students spend the whole day in the school, and the master is present at least one meal. The hours devoted to recreation are employed in singing, gymnastics, etc.

As regards the teaching, it naturally differs much from that given in the ordinary schools. "At the end of the fourth or fifth month of the course," says a biographer of Grundtvig, "it is certain that each student knows various things he did not know before, but it matters little whether he knows much or little, provided that a new impulse has been born in him, a new life, a new source of energy."

The majority of the schools chiefly keep in view general education, understood in the widest and most comprehensive sense. Thus national history sends roots down into Norse mythology while it moves forward to the discussion of social problems of the present day. In other cases, as at the Ryslinge school where the course of instruction is from November to April, practical information and general culture are intimately associated, as the following weekly time-table shows:

Mother-tongue and Composition	6	hours
Danish History	6	"
Agricultural Book-keeping	2	"
General History	6	"
Geography	3	"
Natural Science	4	"
Literature	2	"
Drawing and Geometry	2	"
Law	1	"
Rural Economy	1	"
Physical Training	6	"

To these subjects are added caligraphy and book-keeping in the proportion of 24 hours distributed over the whole period of instruction, also reading and singing every evening, and English for the students who wish for it.

Out of the 65 Folk High schools mentioned in the *Landøkonomisk Aarbog*, 41 give only a general education, to which the other 24 add technical courses.

According to the Statistical Year-book of Denmark, in 1919-20, 4,396 young men and 3,599 young women have taken the courses of the schools

receiving grants in aid. They are classified as follows according to their age:

	Male	Female
Under 16 years	30	19
From 16 to 18 years.	284	272
From 18 to 25 years.	3,542	2,965
Over 25 years	540	343

Three quarters of the young men and more than two thirds of the young women were the sons and daughters of persons engaged in agriculture, either occupying owners or tenants.

As regards the various courses taken by the students the distribution is as follows:

	Males	Females
General Instruction	3,269	3,212
Supplementary Instruction . . .	271	250
Technical Courses	743	1
Domestic Science	—	56
Physical Training	113	80

We may add that the number of students varies between 7 (Skals) and 202 (Askov). The Askov School is the only one where the courses have been taken on several occasions by townspeople; its courses like University courses cover at least two years.

H. M. R. L.

FRANCE.

A FAILURE IN PROFIT-SHARING. — BECKERICH (Abel): Fixation des salaires suivant les cours de blé. *Journal d'Agriculture pratique*, Paris, 24 December 1921.

We drew attention at the time (1) to the agreement between the Central Syndicate of the Melun Society of Agriculture and the labourers of the region for the fixing of agricultural wages in accordance with the fluctuations in the market-price of wheat.

In 1920, wheat stood at 100 francs the quintal and there was no reason to anticipate the fall that brought down the price to between 70 and 75 francs, the current figures. In the ordinary course, fluctuations of less extent might and indeed ought to be expected in the course of successive years, with the normal state of production and of cost prices.

In accordance with the agreement above mentioned, wages were to vary from 12 to 15 francs a day and from 350 to 440 francs a month, ac-

(1) *International Review of Agricultural Economics*, October 1920, page 747.

cording as the price of the quintal of wheat varied between 70 and 100 francs.

Price of quintal of wheat	Daily wages	Monthly wages
From 70 to 74 francs . . .	12.00 francs	350 francs
From 75 to 79 francs . . .	12.50 francs	365 francs
From 80 to 84 francs . . .	13.00 francs	380 francs
From 85 to 89 francs . . .	13.50 francs	395 francs
From 90 to 94 francs . . .	14.00 francs	410 francs
From 95 to 99 francs . . .	14.50 francs	425 francs
From 100 to 104 francs . . .	15.00 francs	440 francs

Neither masters nor men imagined that wheat would fall to prices approaching 70 francs, and it seemed likely that wages would be maintained at the maximum; the men congratulated themselves on having gained unquestionable advantages, and the masters had no misgivings in having agreed to the rise in wages on a basis which in their view was much better as being dependent on the price of wheat and out of their control.

It would thus have been logical enough to insist on the literal carrying out of the contract, and at first sight one can hardly blame the masters for having tried, in accordance with the agreed conditions, to reduce wages to the figures corresponding with the new price of wheat. Naturally on the side of the men, protests were raised, on the ground that if the price of wheat had fallen effectively, the cost of living would have fallen also. In point of fact, the price of bread was far from following the 25 to 30 per cent. fall in that of wheat, and up to the present time it is still far from doing so.

A compromise proposed by the masters on the basis of 13 francs a day and 380 to 390 francs a month has been accepted by the men after a ten days' strike. It is the break-down of the sliding-scale system of fixing wages by the price of wheat. At first sight it certainly seems natural, in a wheat producing region, to interest those working on the farms in the results of farming by proportioning their wage to the sale-price of the commodity to which their labour is contributory, but this is a postulate which assumes that the price of a certain agricultural product is exactly on a footing with the cost of living. The facts show that in reality this parallelism is not inevitable.

M. B.

NORWAY.

THE WAGES OF AGRICULTURAL LABOURERS FROM 1920 TO 1921. — KROBBY (Nils): *Arbeidslønnen i jordbruket. Driftsaarene 1919-20, 1920-21. (Agricultural wages from 1919-20 to 1920-21). Communications of the Association for the Welfare of Norway. Inquiries into the Progress of Agriculture. No. 6, pp. 223-228. Christiana, 1921.* — ARBEIDSLØNNEN I JORDBRUKET (*Agricultural Wages*). *Samvirke* No. 16. Christiana, 15 August 1921.

The Association for the Welfare of Norway has published a short report on agricultural wages in Norway for the years 1920-21, that is to say

in respect of the summer half-year of 1920, and the winter half year of 1920-21, and has instituted a comparison with the preceding years.

Male labourers receiving board and lodging earned on an average 1,355 crowns a year as against 1,201 crowns in the preceding year, that is a rise of 13 per cent. The highest wages were paid in Upland and in Buskerud, and the lowest in Nordland and in More.

Women receiving board and lodging earned on an average 703 crowns a year, that is a rise of 15 per cent. on the preceding year, when they earned 613 crowns. The highest wages were paid in Vestfold and in Buskerud, and the lowest in Troms and Nordland.

As regards the summer half year, the highest daily wage paid during the hay-harvest was 9.88 crowns for men and 5.13 crowns for women, without including the board given by the employer. As to the summer work other than the hay-harvest, the daily wage was about 8.50 crowns for men, and about 4.50 crowns for women, a rise of about 11 per cent. on the wages of the preceding year. In the districts of Ostland wages have risen considerably both for men and for women, by 26 per cent. and 37 per cent. respectively, as compared with the year before.

The daily wage of those who are expected to provide their own board varied between 12 and 13.50 crowns for men, and was about 7 crowns for women.

The daily wage for the winter half-year where board is given was 6.84 crowns for men, and 3.50 crowns for women, that is an increase of about 10 per cent. on the wages of the previous year. For those finding their own board, the daily wage was on an average 10.25 crowns for men, and 5.81 crowns for women, an increase of 7 per cent. on the figures of the previous year.

The complete figures for the whole country show that in 1920-21 the rise was much less marked than in the preceding years. The percentage of increase was at its highest between 1916-17 and 1917-18, a period in which it varied from 35 per cent. to 45 per cent.; between 1918-19 and 1919-20 it varied from 15 per cent. to 25 per cent., and between 1919-20 and 1920-21 it was from 8 per cent. to 15 per cent. The increase was somewhat higher than the average in Ostland and in Eastern Sørland, and on the whole, it was less than the average in Western Sørland, Vestland, in Frødelag and in North Norge. In the northern districts in particular, a fall in wages as compared with the previous year has not infrequently been observed to occur.

H. M. R. L.

LAND SYSTEMS

MISCELLANEOUS INFORMATION RELATING TO LAND SYSTEMS

AUSTRIA.

AMENDMENTS TO THE LAW ON THE RE-ESTABLISHMENT OF SMALL PEASANT HOLDINGS (1).

The Austrian Law of 31 May 1919 (*Staatsgesetzblatt*, No. 310) relating to the re-establishment of small peasant holdings is described in the issue of April 1920 of this *Review* in an article entitled "The Absorption of Peasant Holdings in Austria and Legislative Efforts to Counteract it."

An Amending Law passed by the National Assembly has now altered this law in several not unimportant respects.

There are various reasons for these alterations made when the law had scarcely been in operation two years. In the first place the law was prepared very hurriedly in May 1919 when experience and precedents from other countries were lacking. Now however the work preparatory to restoring to the small cultivators all the lands which in the course of the last 50 years have passed from the hands of peasant proprietors into those of owners of great estates, is so far advanced, that it will soon be possible to make a beginning with the actual transfers, and in fact some isolated small holdings have already been re-established. This being so, there has been ample opportunity to observe the working of the Law, and it has been possible to adapt it to practical requirements.

The innovations are of various kinds, but we shall only deal with those which are fundamental, that is, which involve questions of principle. In carrying out the Law it has for instance frequently been found that persons who are not farmers have bought up a small holding (*Bauerngut*) for speculation or other purposes, and have applied it to other uses than agricultural production. Up to the present time such farms could not be obtained for resettlement, as Article 1 of the Law could only be applied if one farm had been joined with another. According to the Amending Law a holding which has ceased to be used for agricultural production can be expropriated even if the existing occupier possesses no other land.

According to the literal meaning of the Law of 1919 holdings were excluded from expropriation, where several children or brothers and sisters of the existing owner had to be taken into account as heirs and would on the division of the property after the death of the owner acquire shares not exceeding the ordinary size of a small holding. Since it proved that in cases to which the Law unquestionably applied, expropriation had been prevented by naming a large number of heirs, who were frequently not

(1) See No 479 of the shorthand reports of the sittings of the National Council. The Amending Law will shortly be published in the *Staatsgesetzblatt*.

in any way in a position to take up a holding, the principle was laid down in the Amending Law that only those heirs should be taken into account who would presumably be in a state of economic independence at the death of the owner, or on attaining the age of 26 years.

In paragraph 6 of Article 3 it is laid down that the payment of damages can be exacted for any act committed with a view to preventing the carrying out of the Law. In such cases too the agricultural authorities with whom the execution of the law lies can take provisional measures and impose fines.

Of considerable importance is the provision in paragraph 2 of Article 3, according to which in certain special districts, for example, in mountain-valleys, where a number of holdings to be restored to small cultivators is found together, the formation of the new holdings may proceed along a definite settlement plan.

Lands let to a number of small tenants can now be expropriated even in isolated parcels, and not necessarily as a whole. Thus the Amending Law enables the existing small tenants to rise into the class of independent farmers.

- In order to prevent anyone selling his holding at the present abnormally high prices, so as to purchase another on the more favourable terms afforded by the Resettlement Law, it is decreed that no one can purchase land who was in possession of a peasant holding at the time when the Amending Law came into force.

By Article 8 the conditions which secure a well-managed holding from expropriation even when it might otherwise be subject to it are extended in the interests of the present occupiers. In laying down these provisions the principle was adopted that the Law must not arbitrarily break up or destroy every large holding, its object being to create new agricultural holdings where none any longer exist, and to import vitality to those in existence, wherever this is possible without reducing the yield obtained by the present occupiers.

The provision contained in Article 7 is new. According to this article lands which have been declared available for resettlement by small cultivators but for which no application is filed within two years, can be applied for by the commune, the district, or the State, with a view to being let by these bodies in emphyteusis (*Erbpacht*). This provision shows that the National Assembly is more and more convinced of the advantages offered by the system of emphyteusis in certain circumstances.

The Amending Law also fixes the requisition price of expropriated lands; it enacts that the yield of the years 1914 to 1921 shall be taken as the basis for fixing the price, and that the price shall be such as to make it possible for the new owner to farm the land at a profit without however enriching himself at the expense of the expropriated owner. It must not be allowed, therefore, that anyone who acquires expropriated land should, for example, obtain a wood very cheaply of which he could immediately sell the timber at the present inflated prices, and so make a quite unjustifiable profit.

While Article 16 of the Law of 1919 provided for the expropriation,

not of whole estates, but of isolated parcels which had previously belonged to peasant proprietors, and which had been during the last 50 years, incorporated in forest lands, according to the Amending Law, application can also be made for the expropriation (assuming them to be essential to the farm of the applicant) of such parcels as have been incorporated with an agricultural holding larger than a peasant holding. But of course this is only operative if the pieces of land are not indispensable to the present occupier, and if the shape of the holding is not rendered much less convenient by this expropriation.

There is another new provision, to the effect that communes, districts, provinces, or the State, or, in the case of alpine or other pasture land, co-operative societies or agricultural associations, can also apply for parcels of land, provided that the owner of the farm to which the parcels formerly belonged makes no application in respect of them, or if the said farm is no longer in existence. This provision is very important in view of the utilization of the alpine pasture land. Individual occupiers are often not in a position to acquire the large parcels of land which formerly went with the holding and they frequently own too few cattle to utilize the pasturage to the full. The acquisition of the land in question is however of extraordinary advantage to a pasturage society, which the former occupier will naturally join.

Paragraph 3 of Article 16 contains an entirely new provision by which recognized fuel, wood and pasturage rights, which, after forming an integral part of a small property were relinquished subsequent to 1 January 1870 with the consent of the competent authorities, either freely or for a money commutation, may be re-established if there is proof that the management of the holding is impeded by the loss of these rights.

Paragraph 2 of Article 16 enacts that parcels of land acquired under the Resettlement Law are not to be treated as separate from the main holding. This is intended to prevent that parcels of land which are now being acquired at low prices should afterwards be resold at a large profit.

If isolated parcels, cut off from peasant holdings, have been unnecessarily afforested, the present owner must under Article 19 of the Law offer other pieces of agricultural land in exchange.

Article 21 provides for the creation of a fund (*Wiederbesiedlungsfond*) which is built up from State contributions, contributions from the provinces and from fines paid in. Out of this fund advances may be made for the erection of buildings, for making improvements, and for working expenses.

While the Law of 1919 fixed no final date for making applications for particular parcels of land, Article 24 enacts that such applications can only be lodged up to 1 August 1924, and applications relating to the re-establishment of lapsed rights up to 1 February 1922.

As cases have occurred where proprietors have voluntarily offered land, not falling under the Resettlement Law, for settlement by disabled men, and as it is to the general interest that these lands should continue to fulfil this purpose of public utility, Article 4 of the Amending Law

makes it possible to place such lands, if so desired, under restrictions with regard to alienation and charges, as well as under obligations with regard to the management.

To sum up, it may be said that the Amending Law which came into force on 1 August 1921 is calculated materially to contribute to a better distribution of land in Austria without any appreciable hardship being inflicted. The Amending Law is peculiarly adapted to meet the requirements of a sound, practical, agrarian policy and further does much towards the gradual remedying of the evils resulting from the absorption of small agricultural holdings which were so serious an obstacle to Austrian agricultural production. The completely disinterested action of the agricultural authorities who are called on to put the Resettlement Law into actual practice is a guarantee that the readjustment will be carried out without injury to economic interests.

H. KAHLBRUNNER.

FRANCE.

AN OFFICIAL EXPERIMENT IN HOME COLONIZATION. — COMMUNICATION DE MINISTÈRE DE L'AGRICULTURE.

Following on the experiment described in a previous issue (1), the Ministry of Agriculture has sent the following communication to the press:

"The attempts at colonization of certain departments of the south-west by families of Breton cultivators seem from now likely to be crowned with success.

"The scheme is developing in Dordogne, in Gers, in Lot-et-Garonne, and in Tarn-et-Garonne with groups coming from Finistère, whose example will probably be followed by peasant families from Morbihan and from Côtes-du-Nord.

"The main part of the work, on the suggestion and with the support of the Ministry of Agriculture, is carried out, so far as regards the migration, in Finistère by the *Office Central des Œuvres mutuelles agricoles*, at Landemeau, in Morbihan by the Departmental Agricultural Office, at Vannes, in the Côtes-du-Nord by the Agricultural Labour Bureau at Saint-Brieuc.

"On the other hand the work of settling the migrants on the land is entrusted to the Agricultural Labour Bureaux of Périgueux, Auch, Agen and Montauban. The first department to show practical results was that of Dordogne. In the month of June, 40 farms were taken up by 40 Finistère families. On 7 September 70 more heads of families arrived at Périgueux with the aim of settling in the department.

"By this means, more than 100 farms are so far restored to satisfactory cultivation.

"In Gers, under the direction of the Prefect, the Agricultural Labour Bureau has just taken measures to organize the settlement of the migrants.

(1) *International Review of Agricultural Economics*, November 1921, page 609.

"Complete statistics of vacant farms are shortly to be drawn up, and before long the Breton cultivators will be able to gain an idea for themselves of the relative value of the offers made to them.

"Apart from this, some Breton families have already rented some farms in this department.

"Lot-et-Garonne presents a different situation. In this department farms are more often offered for sale than for letting whether on a rent-paying or on a produce-sharing basis. The Agricultural Labour Bureau proposes to make a closer study of the question before establishing a definite programme.

"In Tarn-et-Garonne an important meeting over which M. Puis, Under-Secretary of State for Agriculture, presided, was held at Montauban on 9 September. The colonization scheme was explained in all its details. The Agricultural Labour Bureau has been made responsible for carrying it out, keeping in view what has been effected in Dordogne.

"It is also to be noted that a settlement has come about in the Southwest of a certain number of Swiss and Belgian farmers." M. B.

SWEDEN

NUMBER, EXTENT AND METHOD OF FARMING AGRICULTURAL LANDS. —

JORDBRUK OCH BOSKAPSSKÖTSE ÅR 1919 AV KUNGL. STATISTISKA CENTRALBYRÅN (*Agriculture and Stockbreeding in 1919. Central Statistical Bureau*). Stockholm, 1921.

— THE SWEDISH AGRICULTURAL LABOURER. Swedish Government's Delegation for International Collaboration in Social Politics. Stockholm, 1921.

The land census, taken in 1919, brought out clearly the way in which rural property is distributed in Sweden. Since then a large number of fresh data has come to hand. The classification of holdings, according to official data, is as follows.

Classification of Rural Holdings.

Area of cultivated land included in the holding	Number of holdings	Percentage	Total area	Percentage
Less than 2 hectares	120,788	28.2	139,137	3.7
From 2 to 10 "	208,804	48.7	1,081,407	28.6
From 10 to 50 "	91,235	21.3	1,753,976	46.4
More than 50 "	7,931	1.8	807,304	21.3
Total . . .	428,758	100.0	3,781,824	100.0

Economic independence is not as a rule conferred by the possession of a holding of less than two hectares. Generally speaking, such holdings can only be counted on to supplement the earnings of some other occupation. Cultivators holding from 2 to 10 hectares can be sure of the satisfaction of the greater part of their needs, if not of all necessities.

Holdings of from 10 to 50 hectares of cultivable land can only be

worked with the assistance of several day labourers. The holder of more than 50 hectares has to restrict himself to superintending labourers' work.

It appears from the above table that the majority of the holdings are small, while the large estates are less numerous, and only comprise a fifth part of the total area under cultivation. The great variety in the geographical conformation has naturally had a very great influence on the distribution of the different kinds of holding. In the plains where there is a considerable density of population, and where cultivation is relatively easy, very large estates are formed. Amongst these are estates consisting of a number of farms, under common management, but cultivated by groups of labourers and foremen either partially or completely independent of each other. In certain districts, the tenant system is in existence as well. In the case of large estates where there are cultivated lands lying at some distance from the centre, with intervening tracts of land not yet brought under cultivation, the outlying cultivated lands are detached and leased separately. A holding let in this manner is known as a *torp*. The tenants of these *torp* are by agreement bound to work a certain number of days on the lands which form the central portion of the large estate.

The large holdings are found principally in the plains of Central and Southern Sweden, either isolated or surrounded by independent farm-holdings of greater or less extent. This kind of grouping is noticeable especially in the neighbourhood of industrial districts and on the coast, where the fishing population, as a rule, own small parcels of land. On the lofty plateaux and in the forest region, cultivable land is generally divided into small holdings. Although a fair number of large estates may be seen on the high tablelands of Southern Sweden, and in the central region of mines and forests, these become fewer and fewer as we go northwards.

The official figures indicating as they do that small holdings are widely spread through the country show that the cultivable land is for the most part in the hands of owners. This is confirmed by the statistics of tenancy, which show that in 1919 only 23 per cent. of the holdings, or 99,656 out of 428,023, was occupied by tenants. Among tenants are included persons receiving the produce of certain pieces of land in exchange for work done on the land that the large owners cultivate directly. The following figures make it evident that it is on the small holdings of not more than 10 hectares that we find the actually greater number of tenants, though relatively speaking the number is greatest on the large estates.

	Under 2 hectares	2-10 hectares	10-50 hectares	Over 50 hectares
Number of tenants.	34,444	41,578	20,752	2,882
Percentage of the corresponding group.	35.1	19.9	22.5	36.3
H. M. R. L.				

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Co-operation and Association

GREAT BRITAIN AND IRELAND.

THE ENCOURAGEMENT OF AGRICULTURAL CO-OPERATION
DURING AND SINCE THE WAR.

OFFICIAL SOURCES:

REPORTS OF THE DEVELOPMENT COMMISSIONERS for the Period from 12th May, 1910, to the 31st March, 1911, and for the Years ended 31st March 1912 to 1921. London, 1911 to 1921.

REPORTS OF THE BOARD OF AGRICULTURE FOR SCOTLAND for the Years ended 31st December 1914 to 1920. Edinburgh, 1915 to 1921.

ANNUAL GENERAL REPORTS OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND, 1913-14 to 1919-20. Dublin, 1915 to 1921.

REPORTS OF THE CONGESTED DISTRICTS BOARD FOR IRELAND for the Years ended 31st March 1914 to 1920. Dublin, 1915 to 1921.

Journal of the Board (now Ministry) of Agriculture, Vols. XXI to XXVIII. London, 1914 to 1922.

Journal of the Department of Agriculture and Technical Instruction for Ireland, Vols. XIV to XXI. Dublin, 1913 to 1921.

Scottish Journal of Agriculture, Vols. I to IV. Edinburgh, 1918 to 1921.

Information supplied directly to the International Institute of Agriculture by the Ministry of Agriculture and the Board of Agriculture for Scotland.

UNOFFICIAL SOURCES.

REPORTS OF THE AGRICULTURAL ORGANIZATION SOCIETY for the Years ended March 31st, 1914 to 1921. London, 1914 to 1921.

REPORTS OF THE SCOTTISH AGRICULTURAL ORGANISATION SOCIETY for the Years 1914 to 1920. Edinburgh, 1915 to 1921.

REPORTS OF THE IRISH AGRICULTURAL ORGANIZATION SOCIETY for the Year ending 30th June, 1914; for the Period from 1st July, 1914, to the 31st March, 1915, and for the Years ending 31st March 1916 to 1920. Dublin, 1915 to 1921.

Information supplied directly to the International Institute of Agriculture by the Agricultural Organization Society and the Irish Agricultural Organization Society.

For some years previous to the War it had been part of the settled policy of the British Government to give encouragement to agricultural

co-operation. This policy found expression in the sections introduced into various Acts of Parliament, such as the Small Holdings and Allotments Acts of 1907 and 1908, the Development and Road Improvement Funds Act, 1911, and the Small Landholders (Scotland) Act, 1911, authorizing grants to be made for its encouragement out of State funds. The War brought about no very striking development of this policy though some large special grants were given either during the War or immediately after the cessation of hostilities. It did, however, result in a more general recognition by the Government of the importance of agricultural co-operation, as was evidenced by the speeches of Ministers and by the recommendations of various committees of inquiry. Moreover, for the solution of certain problems connected with the food supply, co-operative methods were adopted on the initiative of the Government itself.

We propose here to give a statement of the financial encouragement given by the State to the promotion of agricultural co-operation, an account of the special applications of co-operative methods to war-time problems and, lastly, an account of the State encouragement given to certain forms of agricultural co-operation which, though not originally a war measure, was continued during the War.

§ I. GRANTS AND ADVANCES FROM STATE FUNDS.

Even prior to the War encouragement was given to agricultural co-operation in Great Britain and Ireland in the form of grants from State funds to the various propagandist bodies engaged in its promotion. During the War these grants were in most cases continued and in some instances increased, but it is not possible to indicate precisely to what extent the grants given during the War are to be regarded as a war measure. We can only give a statement of the grants which were being made at the time of the outbreak of War and of those which were made during the War and in the years immediately following the cessation of hostilities. From this statement a general impression will be obtained of the relation between war conditions and the amount of the grants. We will deal separately with each of the propagandist bodies, but will indicate in connection with each any grants or advances which may have been made to organizations affiliated to it.

The Agricultural Organization Society. — Since 1909 the Agricultural Organization Society has received a grant from the Board (now the Ministry) of Agriculture out of the Small Holdings Account, a fund created by the Small Holdings and Allotments Act, 1907 (1) and maintained chiefly by annual grants from Parliament. The main purpose of this fund was to enable the Board of Agriculture to repay to county councils the whole or any part of the expenses incurred in proceedings relating to the

(1) The provisions of this Act were embodied in the Small Holdings and Allotments Act, 1908, which consolidated the laws relating to small holdings and allotments in England and Wales.

acquisition of land for small holdings, but the Act of 1907 also empowered the Board of Agriculture to make grants out of the Small Holdings Account to societies formed for the promotion of co-operation in connection with the cultivation of small holdings and allotments, and it is in the exercise of this power that grants have been made to the Agricultural Organization Society.

The first grant, which dated from 1 April 1909, was to be £1,200 per annum provided that the income of the society from subscriptions and donations in each year was not less than £1,200. By whatever sum the income exceeded £1,200, the grant was to be increased by a corresponding amount subject to not exceeding the maximum limit of £1,600. The grant in any year was to be calculated upon the income of the society from subscriptions and donations in the previous year.

The maximum was subsequently raised to £2,000 and it remained at this figure until 1918-19, when a special grant of £10,000 (which was definitely regarded as a war emergency grant) was given for work in the promotion of co-operation amongst allotment holders. At the same time the grant previously given was reduced to £1,000.

In the following year the special allotments grant was reduced to £5,000, but the general grant for work in connection with small holdings and allotments was raised to the fixed sum of £4,000, at which figure it has since remained. The special allotments grant was, however, discontinued in 1920-21.

Since 1911-12 the Agricultural Organization Society has received substantial grants out of the Development Fund. This fund was created by the Development and Road Improvement Funds Act, 1909, and consists principally of money specially voted by Parliament. To assist the Treasury in its administration of the Development Fund the Act provided that eight commissioners should be appointed, to be known as the Development Commissioners. On the recommendation of these Commissioners the Treasury may make grants out of the Fund for any purpose calculated to promote the economic development of the United Kingdom, and amongst the purposes specifically mentioned by the Act is that of aiding and developing agriculture by the organization of co-operation.

At the time the War broke out the Development Commissioners were making annual grants to the Society to cover the excess of its expenditure over its income from other sources, up to a maximum of £8,000. This continued until 1917-18, when the maximum was raised to £16,000. In 1918-19, the Development Commissioners gave to the Society a block grant of £6,000, together with £1 for every £1 raised as voluntary contributions and £4 for every £1 received as affiliation fees from the affiliated co-operative societies. In 1919-20 and 1920-21 the Society received from the Development Fund a block grant of £16,000, together with a sum equal to four times the voluntary income (subscriptions and affiliation fees) of the Society during the previous year. This method of calculating the grant was adopted with a view to increasing the voluntary income of the Society and gradually withdrawing the grant. For the year 1921-22, the grant

promised was a sum equal to twice the voluntary income, while for 1922-23 it will only be a sum equal to the voluntary income, and it will then cease altogether. The increased grants given since 1917-18 may be regarded as a special measure taken in view of the conditions obtaining during the War and immediately after the cessation of hostilities, and the gradual withdrawal of the grant as a measure of economy rendered possible by the return to normal conditions.

During the years 1917-18 to 1920-21, the Agricultural Organization Society received a special grant from the Board of Agriculture in repayment of expenses incurred in the work of organizing co-operative milk depots, which was undertaken by the Society at the Board's request. This grant amounted to £708 in 1917-18; £974 in 1918-19; £600 in 1919-20 and £177 in 1920-21.

In 1919-20 the Society received from the Treasury a loan on mortgage of £15,000 free of interest and repayable on 31 March 1922, to cover the expense of acquiring and adapting new premises for its central organization.

In Table I are shown the precise amounts of the various grants received by the Agricultural Organization Society in each year since 1913-14.

TABLE I. — *Grants Received by the Agricultural Organization Society since 1913-14.*

Year	Grant from Small Holdings Account	Special allotments grant	Special dairy grant	Grant from the Development Fund
	£	£	£	£
1913-14	2,000	—	—	7,500
1914-15	2,000	—	—	8,000
1915-16	1,988	—	—	7,988
1916-17	1,861	—	—	6,861
1917-18	2,000	—	708	15,350
1918-19	1,000	10,000	974	16,752
1919-20	4,000	5,000	600	36,000
1920-21	4,000	—	177	28,000
1921-22	4,000	—	—	11,586

Scottish Agricultural Organisation Society. — At the time of the outbreak of War the Scottish Agricultural Organisation Society was receiving a grant from the Development Fund equal to 50 per cent. of its general expenditure on the organization of co-operative methods in rural districts in Scotland, with a maximum of £1,000. The grant continued to be given on this basis until 1919, when the Development Commissioners agreed to give a grant in aid of the Society's general expenditure, up to a maximum of £2,000. In 1920 the maximum was increased to £2,500.

Early in 1914 the Society applied for a grant from the Development Fund in aid of the salary and expenses of a Gaelic-speaking organizer

whom it was proposed to appoint to work solely in the Hebrides. The Development Commissioners recommended the payment by a grant from the Fund of one-half of the salary and expenses of such an organizer in the year 1914-15, with a maximum of £150. The Society also applied to the Board of Agriculture for a grant in aid and the Board, in view of the duty imposed upon it by the Small Landholders (Scotland) Act, 1911, of promoting and developing agricultural organization and co-operation, agreed to make a grant equivalent to the amount contributed from the Development Fund.

The organizer appointed was, however, called up in August 1914 with his Territorial Regiment and was subsequently killed in action. The grant was thereafter allowed to lapse, but in 1918 both the Board of Agriculture and the Development Commissioners agreed to a renewal of their grants on the same conditions originally imposed. The special grant from the Development Fund was continued in 1919, but in 1920 it was merged in the general grant. The grant from the Board of Agriculture still continues to be given.

Table II shows the grants received by the Scottish Agricultural Organisation Society in each year since 1914. It will be noted that the grant calculated upon the expenditure of one year is received in the following year.

TABLE II. — *Grants Received
by the Scottish Agricultural Organization Society since 1914*

Year	From the Development Fund		From the Board of Agriculture for Scotland in aid of the salary and expenses of a special organizer for the Hebrides
	in aid of the general work of the Society	in aid of the salary and expenses of a special organizer for the Hebrides	
	£	£	£
1914	820	—	—
1915	827	45	45
1916	648	—	—
1917	467	—	—
1918	755	—	—
1919	698	150	150
1920	2,000	150	150
1921	2,252	—	150

In 1914, a loan of £1,500 free of interest, for a period not exceeding five years, but repayable in whole or in part after three months' notice had been given on either side, was made by the Board of Agriculture to the Scottish Farm and Poultry Produce Federation, Ltd., which is affiliated to the Scottish Agricultural Organization Society. The Federation, which then comprised 53 co-operative societies organized for the purpose

of obtaining by mutual effort better prices for eggs and other farm produce, was greatly hampered by lack of capital, which precluded it from paying cash for the eggs and other produce received from the co-operative societies and also hindered the carrying out of its scheme for supplying the societies with farm requisites. A loan of £1,000 was also granted to the Federation to enable it to supply agricultural seeds to co-operative agricultural societies on more favourable terms than could be obtained by the societies individually.

From reports made to the Board of Agriculture for Scotland early in 1915 it appeared that the potato and oat crop in Lewis and Harris in the previous season had been poor and that consequently the crofters would require to purchase a larger quantity of seed than usual from merchants on the mainland. It was estimated that the cost of the seeds required would be £1,000 and of this amount half was contributed in equal proportions by the Scottish Advisory Committee of the Prince of Wales's National Relief Fund and the Board of Agriculture for Scotland, the other half being paid by the crofters. The work of purchasing the seeds and arranging for their re-sale and distribution in Lewis and Harris was carried out by the Scottish Agricultural Organisation Society.

In the exercise of the powers conferred upon them by Section 16 of the Land Settlement (Scotland) Act 1919, the Board of Agriculture for Scotland granted in 1920 to the Nether Lorn Agricultural Co-operative Society (affiliated to the Scottish Agricultural Organisation Society) a loan not exceeding £500, being half the estimated cost of the erection and equipment of a cheese factory at Clachen Seil, Argyllshire. The loan was given at 6 per cent. interest, repayable in ten years, no repayment of capital or interest to be made during the first two years. The Board also made provision for assisting in this manner one or two other schemes in Argyllshire.

Under the same section the Board also granted to the Port William Dairy Farmers' Association (also affiliated to the Scottish Agricultural Organisation Society) a loan of £3,500 to enable them to complete the erection of a milk depot at Port William, the total cost of which will be £16,000. The rate of interest on this loan will be 6 per cent. and the period of repayment five years.

The Scottish Smallholders' Organisation. — This society was formed in 1913 with the special object of promoting the interests of small holders in Scotland by various methods, including the organization of co-operative credit and of facilities for the disposal of their produce. In the first year of its existence the funds of the Organisation were derived entirely from voluntary subscriptions and from guarantees given by prominent supporters, but in 1914 the Board of Agriculture for Scotland agreed to give a grant, not exceeding £600 in all, of an amount equivalent to one half of the total expenditure, as approved by the Board, of the Organisation during the period from its inauguration to 28 February 1915. The full amount, £600, was actually paid.

In 1915 the Board of Agriculture for Scotland undertook to give the

Organisation a grant equal to one half the administrative expenditure of the Organisation for the year. The grant was continued on this basis until 1917, when the Board of Agriculture agreed to give in addition a special grant in aid of the Land Bank Inspector's salary. In 1918 another special grant, amounting to £250, was given for the payment of local sub-organizers. For 1919 the same grants were continued, with the addition of a further special grant of £200 towards the payment of an accountant and auditor.

In 1920 the Organisation applied to the Board of Agriculture for an increased grant. As the Scottish Agricultural Organisation Society had made a similar application to the Development Commissioners, the Board suggested to the two associations that they should agree to delimit exclusive spheres of influence, in order to avoid overlapping. The proposals were not accepted by either association, and as the greater part of the year had now passed, the Board advanced a sum of £800 (being half of the grant paid in 1919) to the Scottish Smallholders' Organisation to enable it to carry on its work until the total grants to be made were settled. A further sum of £450 was afterwards granted to the Smallholders' Organisation in respect of 1920, making a total grant for that year of £1,250. For 1921 the grant was, however, reduced to £600.

Table III shows the grants received by the Scottish Smallholders' Organisation in each year since 1914.

TABLE III. — *Grants Received by the Scottish Smallholders' Organisation since 1914.*

Year	From the Board of Agriculture for Scotland			
	Grant in aid of the general expenditure	Grant for the payment of local sub-organizers	Grant in aid of the salary of the Land Bank Inspector	Grant towards payment of an accountant and auditor
	£	£	£	£
1915	592	—	—	—
1916	507	—	—	—
1917	600	—	168	—
1918	861	—	158	—
1919	600	250	187	200
1920			1,250	
1921			600	

In 1914 the Board of Agriculture agreed to make a loan not exceeding £500 to the Scottish Central Markets, Ltd., to enable it to supply agricultural seeds to co-operative societies. The Central Markets, Ltd., is connected with the Smallholders' Organisation and undertakes the double duty of finding a profitable market for the produce of smallholders and

of the collective purchase of farm requisites on behalf of local societies. For various reasons, of the loan agreed to only £88 was required by the Central Markets. In 1915, however, a loan of £500 was made by the Board of Agriculture to the Central Markets for the purchase of manures as well as of seeds on a cash basis. A loan of the same amount was made in 1917, and in 1919 the Board of Agriculture made a loan of £2,000, free of interest for one year, to the Central Markets for the purchase of seeds, manures and feeding stuffs. A special short-term loan of £2,000, repayable in six months, was also made to the Central Markets in 1919 to meet the cost of seed oats and potatoes for distribution in Lewis. In addition to the loan, a grant of £381 was made towards the cost of freight, being half the sum expended by the Central Markets under that head. In 1920 a special short-term loan of £1,500 was made to the Central Markets to meet the cost of the provision of seed oats and potatoes in the Outer Hebrides.

The Irish Agricultural Organization Society. — In former years this Society received grants from the Department of Agriculture and Technical Instruction for Ireland in aid of its work, but these grants were discontinued in 1908. For some years prior to 1908 the Society had received small grants from the Congested Districts Board for the organization of agricultural credit societies and home industries societies in the Congested Districts. In 1908 the amount of the grant was fixed at £350 per annum, and this grant continued to be made to the Society until 1916, when it was withdrawn as a measure of economy.

Since 1913 the Irish Agricultural Organization Society has received grants from the Development Fund. An interim grant of £3,500 was given in respect of the period up to 31 March 1913, and for the year 1913-14 it was agreed to give a grant equal to the Society's own income in that year from affiliation fees and subscriptions, with a maximum of £4,000. For 1914-15 the grant was calculated on the same basis, but an additional grant of £1,000 was given. All grants subsequent to this were proportionate to the contributions received from the affiliated societies and the ratio decreased from year to year, it being the policy of the Irish Agricultural Organization Society to induce its affiliated societies to rely more upon their own resources and less upon State-aid for the upkeep of their central union. For 1915-16 a grant was given equal to £2 5s. for each £1 contributed by the affiliated societies in the same year. For 1916-17 the grant was equal to £2 for each £1 contributed by the societies in the previous year. For the years 1917-18 to 1919-20 it was equal to £1 5s for each £1 contributed by the societies in the previous year. For 1920-21 the grant was equal to the amount contributed by the societies in 1919-20. For 1921-22 a grant will be paid equal to 13s. 4d. for each £1 of contributions received in 1920-21.

Table IV (page 125) shows the grants actually received by the Irish Agricultural Organization Society in each year since 1914-15.

As early as 1898 the Congested Districts Board for Ireland began to make advances to the agricultural credit societies formed by the Irish Agricultural Organization Society in congested areas. The Department

TABLE IV. — *Grants Received by the Irish Agricultural Organization Society since 1914-15.*

Year	From the Development Fund	From the Congested Districts Board
	£	£
1913-14	5,500	350
1914-15	4,822	350
1915-16	7,358	350
1916-17	5,320	—
1917-18	5,400	—
1918-19	6,046	—
1919-20	7,820	—
1920-21	7,100	—

of Agriculture and Technical Instruction for Ireland, which was established in 1901, immediately adopted the same policy and made advances to credit societies in non-congested areas. The Departmental Committee on Agricultural Credit in Ireland, the Report of which was published in 1914, recommended, however, the discontinuance of the system of advances from State funds and the gradual withdrawal of the advances outstanding. This course was adopted both by the Department of Agriculture and by the Congested Districts Board and the outstanding advances were withdrawn during the war period.

§ 3. THE PURCHASE OF ARMY SUPPLIES FROM CO-OPERATIVE SOCIETIES.

As early as 14 August 1914 the Farmers' Central Trading Board asked the Agricultural Organization Society to approach the War Office with a view to arranging for the direct supply of produce from agricultural co-operative societies to the troops. On 9 September a conference took place between representatives of the Central Trading Board, of the Agricultural Organization Society and the War Office, when it was decided that societies should be put in touch with the Base Supply Depots. This was done and in several instances a large amount of produce was supplied by societies.

Shortly afterwards Farm Produce Committees were set up by the Board of Agriculture in each county in England and Wales to act as intermediaries between the military authorities and the farmers in the purchase of supplies. The Agricultural Organization Society brought its affiliated societies into touch with these committees, and considerable business resulted. Thus, for example, some of the agricultural co-operative societies in Yorkshire were able in this way to arrange for the sale of large quantities of hay by their members to the Purchasing Officers.

In October 1915 the Agricultural Organization Society was approached on behalf of the General Officer Commanding the 68th Division, stationed

at Bedford, in connection with the supply of vegetables and fruit to the troops under his command. The system under which they had been supplied had proved unsatisfactory in practice. It resulted in competition between the different units in order to secure produce, and this caused an inflation of prices; the quality of the produce, too, left much to be desired. The Agricultural Organization Society, in conjunction with the Divisional Purchasing Officer, formulated a scheme for purchasing in bulk for the whole Division, which was accepted by the General Officer Commanding and at once put into force. The scheme worked most successfully. The quality of the produce greatly improved, there was a saving to the military authorities, the growers benefited by the removal of intermediate profits, and, incidentally, the prices to the civilian population were also reduced.

The Army Council approved the extension of the scheme to other camps. A new committee was formed called the Army Canteen Committee, and the Agricultural Organization Society, at the request of the Army Council, nominated a representative to serve on it. Command Canteen Committees were also formed, on each of which the Agricultural Organization Society was represented.

The extended scheme necessitated the formation of a central purchasing body, from which the various camps could be supplied. A society was registered under the title of Agricultural Supplies, Ltd. This society did not distribute any profit; it charged a commission to cover management expenses, but any surplus was returned to the War Office. In its early days the policy of Agricultural Supplies, Ltd., was influenced by the Agricultural Organization Society, but the Army authorities gradually assumed control and it was eventually absorbed by the Army Canteen Committee.

When the sale of wool was controlled by the Government, working through the Contract Department of the War Office, the agricultural co-operative societies which had been engaged in the collection and sale of their members' wool were appointed as recognized collectors of wool from their members on behalf of the Government.

In 1917 arrangements were made to supply Muniton Canteens with fruit and vegetables direct from societies of growers.

The Scottish Agricultural Organization Society was also requested by the military authorities to assist in the provision of vegetables and other produce for the troops, and took steps to organize the supply of such produce by local co-operative societies in Scotland to units stationed in their neighbourhood.

§ 3. THE PROMOTION OF CO-OPERATIVE CHEESE-MAKING.

Soon after the War broke out the Board of Agriculture advised the production of more cheese, and in the summer of 1915 they induced various local education authorities to establish migratory schools of cheese-making or to increase the number of existing schools. Grants were given to the

education authorities in aid of the expenses of the schools and the Board itself obtained a grant of £500 for the purchase of sets of apparatus to be lent to the local authorities.

The system was continued in 1916 and at the end of June of that year there were 37 migratory schools at work and instruction had already been given in 200 centres.

One of the results of the work of the schools was that it led dairy farmers to realize the advantages to be gained by co-operation in cheese-making. A so-called "co-operative cheese school" was established in Cornwall in April 1916. This was a school in which the volume of milk dealt with was larger than was the case with the ordinary travelling school and in which longer courses of instruction were given in each centre visited. Those resident within easy reach of the centre were received as daily students and a selected number of others from a distance were given scholarships to become resident at or near the school for a time. The school was only located at a centre where the farmers of the district would jointly undertake to supply daily a given quantity of milk (usually not less than 200 gallons), to accept payment for the milk on a strictly co-operative basis and to appoint, pay and place under the direction of the county instructress in charge of the school, for so long as the school remained at that centre, some person approved by the instructress who should act as their manager in the event of their deciding to make cheese co-operatively after the close of the school at that centre. A co-operative cheese school usually remained at a centre for from 8 to 12 weeks.

In 1917 nine co-operative cheese schools were conducted in seven counties — Carnarvonshire, Cheshire, Cornwall, Denbighshire, Herefordshire, Montgomeryshire, and Wiltshire. In 1918 the number had risen to 18, which were carried on in the same counties and four others, Anglesey, Berkshire, Cumberland and Flintshire. In 1919 fifteen schools were at work in Anglesey, Carmarthenshire, Carnarvonshire, Cheshire, Cornwall, Denbighshire, Flintshire, Herefordshire, Montgomeryshire and Wiltshire.

As a result of the work of these schools 32 co-operative cheese-making societies were formed. Beginning in 1916 with one society, 10 more societies were formed in 1917, 10 more in 1918 and 11 more in 1919.

One of the most important results attending the formation of co-operative cheese factories has been a considerable increase of milk production in the districts where they are formed. Thus in one district where very little milk was produced previous to 1917, a co-operative society was formed which during that year dealt with 30,000 gallons of milk, in 1918 with 64,000 gallons and in 1919 with no less than 108,000 gallons. These increases were entirely due to the keeping of additional cows; moreover the increase of dairying took place without any decrease in the quantity of other farm produce. It was noted, again, that six members of a society formed in 1917 who kept a total of 37 cows in that year increased the number of their cows to 68 in the following year.

§ 4. THE FORMATION OF CO-OPERATIVE MILK DEPOTS.

In the autumn of 1917 the Committee on Production and Distribution of Milk recommended, in their Second Interim Report, that steps should be taken to establish milk depots in districts where milk is produced in considerable quantities but through lack of organization does not ordinarily become available for human consumption. In order to facilitate the creation of such depots, they advised that the State should, if necessary, assist by lending a portion of the capital required.

Acting on this recommendation the Board of Agriculture obtained the sanction of the Treasury to lend capital, on the basis of 6 per cent. interest and repayable in a term of years. A general scheme was devised for the purpose and the work of organizing the depots was entrusted to the Agricultural Organization Society. It was for this purpose that the special dairy grants, to which we have already referred, were given to the Society.

The scheme was brought into operation about the middle of 1918 and by the end of that year ten depots had been formed. Five of these were in districts where co-operative cheese schools had been conducted. In August 1918 the depots numbered 299 members and were dealing with 7,500 gallons of milk per day. By the middle of November, the number of members had risen to 509 and the quantity of milk received at the depots to 68,000 gallons per day.

As in the case of the co-operative cheese factories, the formation of the milk depots was followed by an increase in the number of cows kept. Before the end of the year 1918 the number of cows kept in one district had increased by 25 per cent., in another by 45 per cent., and in a third by 50 per cent.

The special dairy scheme continued in operation until 31 March 1920. It was taken up with great energy in Wales, more particularly in North Wales, and the large number of societies formed were the means of bringing about a considerable extension of the dairying industry there.

§ 5. CO-OPERATIVE SLAUGHTERHOUSES.

When the meat supply of the country was placed under control, the Ministry of Food introduced a system whereby cattle and sheep were sold through selected markets, each covering a specified area. Controlled prices were fixed in accordance with a scale of grading and at each market grading committees were appointed, consisting of a farmer, an auctioneer and a butcher. All meat became the property of the Ministry and was distributed by its officials through butchers' associations, which were formed in all parts of the country. This system entailed the necessity of setting up Government slaughterhouses in certain districts.

No system of grading can be completely satisfactory to all parties and the Ministry advocated the general introduction of the sale of cattle and sheep on the dead-weight system. The suggestion met with opposition.

from the farmers, who feared that they would not be credited with the weight of their own cattle. This opposition prevented the general adoption of the dead-weight system, but the Ministry decided to introduce it as an alternative to grading wherever there was a sufficient demand for it. They were anxious that the dead-weight system, where introduced, should have the full confidence of the farmers, and they considered that this confidence would be best obtained by allowing the farmers, working on co-operative lines, to control the slaughterhouses. The Agricultural Organization Society was approached and as a result of the negotiations a scheme was drawn up and approved.

The adoption of the scheme in any district was conditional on the majority of the farmers who wished to adopt the dead-weight system desiring to work on co-operative lines. The co-operative society became the Government slaughterhouse agent; it controlled the slaughterhouse under Government supervision; it appointed a technical manager and an accountant, both appointments however being subject to the approval of the Ministry of Food; it paid the farmers for the sheep and cattle brought in and received payment for the meat from the butchers on behalf of the Ministry. The only expenses for which the society was liable were the salaries of the technical manager and accountant. Slaughtering and other technical expenses were met from a fixed scale, and the Ministry of Food was responsible for the rent of the premises, cost of adaptation, etc. The expenses of the society were met by a commission of $1\frac{1}{2}$ per cent. on the value of the carcasses. The full carcass, including offals and hide, became the property of the Government, but sheep skins were either returned to the farmer, or value was allowed for them.

By the end of 1918 five co-operative slaughterhouses were working under the scheme. In each case the scheme was put into operation by already existing farmers' co-operative societies. In March 1919 eleven additional farmers' co-operative slaughterhouses were working successfully. By this time the near approach of decontrol had made it necessary to modify the scheme and the Ministry of Food no longer guaranteed the societies against loss.

Many other applications were made for the transfer of Government slaughterhouses to farmers' co-operative societies, but about the middle of 1919 the Ministry of Food announced that no more transfers would be sanctioned before decontrol. As the result of a conference held between representatives of the Ministry of Food, the Ministry of Agriculture and the Agricultural Organization Society on 30 October 1919, the Ministry of Food agreed that societies wishing to take over slaughterhouses on decontrol should have an option of transfer on all slaughterhouses not the property of wholesalers. They also agreed to pay an allowance by way of remuneration for management at the rate of £350 per slaughterhouse in lieu of the commission previously paid, the allocation of the allowance as between the slaughterhouses being entrusted to the Agricultural Organization Society. Until decontrol the co-operative slaughterhouses, which then numbered 24, worked under this arrangement.

The control of live stock and meat terminated on 4 July 1920. Transfers of slaughterhouses to co-operative societies were allowed a month before that date in order to give the societies experience in their management. In anticipation of decontrol arrangements were made for marketing the surplus meat supplies from the slaughterhouses through the Agricultural Wholesale Society at Smithfield and other wholesale markets.

The working of the societies after decontrol did not prove quite as successful as had been anticipated. Prices were offered to farmers for beasts at live weight which exceeded those on the dead weight basis, and they were tempted to withdraw their support from the co-operative slaughterhouses. On the other hand the sale of surplus supplies in excess of local consumption did not prove a difficulty; the arrangements made were quite successful and the Agricultural Wholesale Society could have handled much larger supplies.

§ 6. THE CO-OPERATIVE MARKETING AND PRESERVATION OF FRUIT AND VEGETABLES.

At the time the War broke out the fruit and vegetable crop was very abundant and there was risk of considerable waste owing to lack of marketing facilities. Steps were taken by the Government to develop the bottling and drying of fruit and the drying of vegetables. Experiments were made with the assistance of a grant from the Development Fund and large quantities of fruit conserving bottles were distributed. In the promotion of this industry the Agricultural Organization Society and its affiliated societies of growers took a considerable part.

In 1917 the Food Production Department of the Board of Agriculture came to the conclusion that the problem of marketing fruit and vegetables could best be dealt with by the formation of county marketing societies. These societies were started under the auspices of the Horticultural Sub-Committees of the Agricultural Executive Committees. They were formed on co-operative lines and adopted the model rules supplied by the Agricultural Organization Society. The growers themselves were encouraged to find as much capital as possible but an appeal was made on patriotic grounds to other residents in the counties to take shares in the societies.

While every effort was made to run the societies on sound business lines they were expected to handle the less remunerative branches of the business — the sale of the surplus produce of the small growers — as well as the sale of the produce of the larger growers. In recognition of this fact the Food Production Department agreed, subject to certain conditions, to make good any loss on the first year's working up to £250.

In some cases existing co-operative societies affiliated to the Agricultural Organization Society agreed to act as county marketing societies, but in many other counties special societies were formed. Some of these achieved considerable success under war conditions, though the results in other cases were disappointing; this was partly accounted for, however, by the fact that the fruit crop of 1918 was a failure.

The county marketing societies were formed as war emergency organizations and they were not in all respects fitted to cope with more normal conditions. The county, which was chosen as the unit of area for purposes of simplicity, is not always the most suitable area of operations. Under peace conditions, too, marketing societies have to face the keen competition of a highly organized trade, a competition which was scarcely felt during the War. It was also evident that they would have to devote greatly increased attention to the supply of horticultural requisites to the growers.

Consequently, on the cessation of hostilities, the question arose whether it was best that the existence of the marketing societies should be continued on separate lines and for horticultural purposes only, or that they should join forces with agricultural co-operative societies in the same area. It was suggested by the Agricultural Organization Society that only in districts devoted almost exclusively to intensive market gardening was the volume of business to be undertaken sufficient to justify the continuance of a separate society. The Society further expressed the view that horticultural trading could not be successfully conducted on co-operative lines unless the societies were constituted on a democratic basis and controlled by the growers themselves with the assistance of the most competent business managers who could be secured, and unless the area of operations was carefully delimited from a business point of view and worked intensively.

It is perhaps not surprising that in its Report for the Year ended 31 March 1920, the Agricultural Organization Society stated that many of the county societies established under the auspices of the Food Production Department were moribund and others were extinct. Apart from the inherent defects in their constitution, two difficulties confronted the co-operative marketing of fruit and vegetables; the railway transport system was at that time in an unsatisfactory condition and the abnormal shortage of sugar seriously affected the disposal of surplus fruit.

§ 7. CO-OPERATION IN CONNECTION WITH ALLOTMENTS AND SMALL HOLDINGS.

For some years previous to the War there was a steadily increasing demand in England and Wales for an extension of allotments. During the War this movement was strongly encouraged by the Government as a means of increasing food production and, as we have seen, special grants of £10,000 and £5,000 were given to the Agricultural Organization Society in 1918-19 and 1919-20 in aid of its work in promoting co-operation in connection with allotments.

It should be noted that such co-operation takes two distinct forms, often (though not necessarily) combined in the same society. The allotment holders may co-operate in the tenure of the land; that is, the co-operative society which they form may rent land (or even, though more rarely, purchase it) and let it in allotments to the members. Or again they may co-operate for the purchase of requisites or the sale of produce.

In 1917-18, to meet the demand from allotment holders for assistance in forming co-operative societies, a special Allotments and Small Holdings Department was formed by the Agricultural Organization Society, and in the following year, with the aid of the Government grant, a special allotments organizer was appointed for each of the fifteen branches of the Agricultural Organization Society, with the exception of the North Wales Branch, and, in addition, an allotments organizer was appointed for the London area. Each Branch Committee appointed an Allotments Sub-Committee, and a Joint Committee consisting of representatives of the Home Counties Branch, the Eastern Branch and the South-Eastern Branch was formed to advise in the organization of allotment holders in and around London.

In 1919-20, the constitution of the Agricultural Organization Society was further modified by the formation of a distinct Allotments Executive Committee at Headquarters and of separate Allotments Committees in the Branches reporting directly to the Allotments Executive Committee.

We have seen that even prior to the War the Agricultural Organization Society received a grant of about £2,000 a year in aid of its work in the promotion of co-operation in connection with both small holdings and allotments. When the special allotments grant of £10,000 was given in 1918-19, the ordinary grant was reduced to £1,000, but in the following year, the special allotments grant having been reduced to £5,000, the ordinary grant was raised to £4,000 and it remained at this figure when the allotments grant was discontinued. Thus the promotion of co-operation in connection with small holdings has also been specially encouraged by the State. In some cases, at the special request of the Board of Agriculture, co-operative societies were organized in connection with the settlements of ex-service men established by the Board.

Table V shows the progress of the co-operative small holdings and allotments societies since 1913, which was due in great part to the encouragement given by the State. Though it is not possible to distinguish

TABLE V. — *Statistics of Co-operative Small Holdings and Allotments Societies in England and Wales.*

Year	Number of societies	Number of members	Number of tenants	Area of land held (in acres)			Sales
				from public authorities	from other landlords	Total	
							£
1913	191	14,117	(1)	8,015	5,345	13,360	5,536
1914	179	15,280	(1)	9,149	5,404	14,553	7,691
1915	177	15,975	10,498	10,582	4,064	14,646	12,434
1916	174	17,449	11,395	10,444	4,334	14,778	13,286
1917	373	56,695	26,935	11,156	5,048	16,204	25,896
1918	572	90,320	30,228	10,380	4,549	14,929	70,819
1919	987	110,105	31,047	13,175	2,154	15,329	147,495
1920	1,113	116,022	45,010	12,790	5,439	18,229	171,651

(1) Figures not available.

between the small holdings societies and the allotments societies, it may be said that of the societies formed since 1916, the great majority are allotments societies. This is indicated by the smallness of the additional area acquired as compared with the increase in the number of societies and of tenants.

§ 8. LIVE STOCK IMPROVEMENT SOCIETIES.

Though not initiated as a war measure the encouragement given by the State to live stock improvement societies was continued during the War, which, indeed, demonstrated the urgent need of live stock improvement. In describing the encouragement given, we must deal separately with England and Wales, with Scotland and with Ireland.

England and Wales. — A grant for the purpose of improving the live stock of England and Wales was made to the Board of Agriculture from the Development Fund in 1913. It was intended to enable the Board to assist groups of farmers, especially the smaller farmers, to obtain the use of high-class bulls, stallions and boars. In order to impress on farmers the advantages of co-operation in securing the services of good sires, grants in respect of stallions were made only to clubs and societies. In respect of bulls, grants were also made as far as possible to clubs or societies, but in districts where bull societies could not be formed, grants were also made to individual breeders who were willing to place approved bulls at the disposal of their neighbours. In respect of boars grants were at first given only to clubs and societies, but in 1916-17 it was found necessary to relax this rule and to give them also to individual breeders.

Grants were made preferably to societies specially formed to take advantage of the scheme, provided they adopted rules which conformed substantially to those issued by the Board of Agriculture, but grants were also made to existing bull, stallion and boar societies, on condition that their rules were amended where necessary. The registration of the society was not essential.

Grants for stallions were not to exceed £80 for each approved stallion, and of this sum not more than £40 was to be a direct grant, the remainder being utilized for assisted nominations of a value not exceeding half the service fee. The grants for bulls at first did not exceed £15 per annum in respect of any one bull, but the maximum amount was raised to £20 in 1920. Not more than five such grants could be given to any one society. The grant for boars was at first £3, but was raised to £5 in 1920.

Table VI shows the number of societies and individual breeders who received grants in each year from 1914-15 to 1918-19. It does not include figures relating to an important scheme for the encouragement of light horse breeding, which was not carried out through the medium of societies.

The figures relating to horses in the years from 1915-16 onwards do not include the Cumberland and Westmorland Heavy Horse Society which did not possess any stallion, but gave assisted nominations.

TABLE VI. — *Grants to Societies and Individual Breeders for Live Stock Improvement in England and Wales.*

Years	Heavy Horses			Cattle				Pigs			
	Soc- ieties	Stal- lions	Total grant	Soc- ieties	In- divid- uals	Bulls	Total grant	Soc- ieties	In- divid- uals	Bours	Total grant
			£.				£.				£.
1914-15.	65	72	9,100	285	26	370	13,700	100	—	107	1,200
1915-16.	88	97	9,122	489	28	633	9,456	180	—	193	480
1916-17.	93	108	6,050	543	15	659	12,550	186	15	216	1,000
1917-18.	94	110	6,235	578	14	710	12,727	172	92	264	1,348
1918-19.	101	122	12,281	604	7	721	10,389	156	167	350	990
1919-20.	93	118	10,920	549	6	656	9,519	117	221	392	1,048
1920-21.	86	105	9,133	554	6	659	12,935	127	275	424	1,951

Scotland. — The Board of Agriculture inaugurated in 1913 a scheme for encouraging the breeding of heavy horses by means of grants to "approved" societies, the expenditure involved in the working of the scheme being met by a grant from the Development Fund. The grants payable to any approved society were: (1) The annual subscription, up to a limit of 10s., of every small farmer who had a mare served by the society's stallion, and (2) half the service and foal fees, up to a limit of £2 10s., of each mare owned by a small farmer. In 1913 and 1914 only farmers occupying land not exceeding 50 acres in area or with a rental not exceeding £50 could benefit by the scheme, but from 1915 onwards the prescribed limits were raised to 100 acres or £100 rental. Special grants of £20 were also given to societies in the Orkney and Shetland Islands and in the Western Islands to enable them to obtain the services of a stallion from the mainland. In 1916 the grant from the Development Fund was reduced and it became necessary to discontinue the grants in respect of foal fees and membership subscriptions, while the contribution towards the service fee was limited to a maximum of 50s.

The Board of Agriculture have also in operation schemes for the improvement of cattle breeding. In counties other than the so-called "crofting counties" (1) grants are given to approved societies formed for the encouragement of cattle-breeding. The grants are on the following scale:

1. Yearling bulls. For Aberdeen-Angus and Shorthorn Bulls, £15; for Ayrshire and Galloway Bulls, £10. In no case was more than 50 per cent. of the cost price of the bull paid.

2. Two-year-old bulls. For Aberdeen-Angus and Shorthorn Bulls, £12; for others, £8. Grants for two-year-old bulls were only paid in re

(1) These are the counties of Argyll, Inverness, Ross and Cromarty, Sutherland, Caithness, Orkney and Shetland. They are called "crofting counties" because of the prevalence in them of the "crofting" system, that is, of small holdings of arable land, the occupier of which had rights of pasturage in common with others.

spect of bulls which had been accepted for premiums in the previous year.

3. In the event of a society arranging with a farmer for the use of a bull of which he was the breeder or rearer, the grant payable was £12 for Aberdeen-Angus and Shorthorn bulls, and £8 for others.

In the crofting counties the grants could be given not only to approved societies, but to Crofters' Common Grazings Committees or other duly constituted committees. The grants were, in the case of bulls purchased by Committees or hired from owners who had purchased them: for Shorthorn and Aberdeen-Angus bulls, £15; for Galloway, Ayrshire and Highland bulls, £10; for Shetland bulls, £7 10s. When a bull was hired from his breeder or rearer the grants payable were £12, £8 or £6 according to breed. In the event of a grant being made for a second year in respect of the same animal, the grant could not exceed four fifths of the amount granted in the first year.

In 1921 the amount of the first year premiums was raised to £20 for Shorthorn and Aberdeen-Angus bulls and to £12 for Galloway, Ayrshire and Highland bulls, with corresponding increases in the second year premiums.

In the congested districts bulls were also supplied on loan, remaining the property of the Board of Agriculture.

Until 1915 the premiums were only awarded in respect of the services of cows belonging to small farmers who occupied land of less than 50 acres in extent or less than £50 rental, but in 1915 (as in the case of the horse-breeding scheme) the limit was raised to 100 acres or £100.

The expenses of the cattle improvement scheme, in so far as the crofting counties were concerned, were met out of the Board's own funds, but in regard to the other counties, they were met by a grant from the Development Fund.

A somewhat similar scheme was carried out to encourage and improve the breeding of pigs. Premiums were offered to societies or committees which arranged for the purchase or hire of boars, the amount of the premium being £5 in respect of each boar, but this sum was subject to reduction if less than 20 services were given by the boar to sows owned by small farmers, cottars, shepherds, and farm servants. In 1921 the amount of the premium was raised to £7 10s.

In Scotland (as in England and Wales) there is in operation a scheme for the encouragement of light horse breeding, which is not carried out through the medium of societies. There is also in operation a scheme for the encouragement of sheep-breeding, which does not here concern us for the same reason.

The grants received by the Board of Agriculture for Scotland in aid of its live-stock improvement schemes (other than the light horse breeding) are shown in the following table:

TABLE VII. — *Grants Received by the Board of Agriculture for Scotland in all of its Live Stock Improvement Schemes.*

Year	For heavy horse breeding	For improvement of other breeds of live stock
	£	£
1914-15	2,779	1,531
1915-16	6,000	2,720
1916-17	3,080	2,826
1917-18	2,961	3,477
1918-19	3,012	3,663

In Table VIII are given particulars of the societies and committees which have received grants for live stock improvement from the Board of Agriculture for Scotland.

TABLE VIII. — *Societies and Committees in Scotland which received Grants for Live Stock Improvement.*

Year	Heavy Horses			Cattle		Pigs	
	Approved societies	Mares served	Approved societies and committees	Premium bulls	Cows served	Premium boars	Swes served
1914	58	3,054	167	234	14,866	29	822
1915	98	7,115	221	357	20,349	63	1,292
1916	100	5,628	238	390	22,256	64	1,703
1917	99	5,566	265	415	24,422	69	1,805
1918	97	6,162	262	458	25,732	70	2,077
1919	102	6,559	252	448	23,560	70	1,740
1920	102	5,562	245	423	22,132	62	1,635
1921	95	3,420	247	435	22,705	59	1,489

Ireland. — The Department of Agriculture and Technical Instruction for Ireland has in operation various schemes for the improvement of live-stock. The horse-breeding schemes are not carried out through the medium of improvement societies, but such societies are eligible for the premiums offered for bulls and boars.

In 1914, the premiums for bulls were fixed as follows: for Kerry, Dexter, Galloway, and registered dairy bulls, £10; for other approved breeds, not less than £10 nor more than £15, at the discretion of the County Committee of Agriculture. This scale of premiums continued in force until 1918, when the following maximum premiums were fixed: for Kerry or Galloway bulls, £10; for Aberdeen-Angus or Hereford bulls, or for half-bred registered dairy bulls, £12; for Shorthorn bulls, £15; for pure-bred registered dairy bulls, £20.

For boars the maximum premiums in 1914 were £5 for the first year and £3 for the second year, and they remained at these figures until 1919 when the premiums were fixed as not less than £5 nor more than £8 for the first year and not less than £3 nor more than £6 for the second year.

For both bulls and boars special premiums were given to selected applicants in the congested districts.

Statistics showing the number of societies to which grants were made are not available.

§ 9. MILK-RECORDING SOCIETIES.

In all parts of the United Kingdom schemes were in operation before the War, and were continued during the War, for encouraging the formation and working of milk-recording societies, or (as they are sometimes called) cow-testing associations. We must deal separately with each of the three kingdoms.

England and Wales. — With the aid of a grant from the Development Fund, the Board (now Ministry) of Agriculture has made grants to milk-recording societies in England and Wales. Up to 1920 the grant was at the rate of £2 10s. per herd tested per year, subject to a limit of one-half of the expenses of the society. Experience showed, however, that until they had proved the commercial value of keeping milk-records, farmers were disinclined to pay a levy of 3s. to 5s. per cow, which was the approximate charge made to members of milk-recording societies. It was, therefore, decided in 1920 to increase the grant to a milk-recording society for the first and second year of its operations to £3 10s. per herd, and for subsequent years to £3 per herd.

Table IX shows the grants to milk-recording societies in England and Wales.

TABLE IX. — *Grants to Milk-recording Societies in England and Wales.*

Year	Number of Societies	Number of cows tested	Total amount of grant £
1 April 1914 to 31 March 1915 . .	16	7,331	264
" 1915 to " " 1916 . .	20	9,811	660
" 1916 to " " 1917 . .	22	12,950	792
31 March to 1 October 1917	25	14,404	1,119
1 October 1917 to 1 October 1918 .	27	19,793	3,926
1 " 1918 to 1 October 1919 .	38	37,880	2,973
1 " 1919 to 1 October 1920 .	46	61,323	3,926

Scotland. — In 1911 a grant not exceeding £1,000 was made out of the Development Fund in aid of the work of the Milk Records Committee, which had for some years previously been promoting the keeping of milk records in Ayrshire with the aid of small grants from the Highland and Agricultural Society of Scotland and from the Ayrshire Herd Book Society.

The grant was not paid direct to the Committee, hut through the West of Scotland Agricultural College. This arrangement continued until 1914, when the maximum grant was raised to £2,000, to be paid to the Committee through the Board of Agriculture for Scotland. At the same time the constitution of the Committee was amended and its title changed to "The Scottish Milk Records Association." The maximum grant was reduced in 1916 to £1,250, and to £1,230 in 1917, but was raised to £1,600 in 1919, and to £3,100 in 1920. Part of the money paid to the Scottish Milk Records Association is expended in grants to its affiliated local societies, especially in the first and second years of their operations, to enable them to obtain the necessary apparatus and to assist in what may be termed the propaganda work of demonstrating the practical utility of milk-recording.

Table X gives particulars of the local milk-recording societies which received grants in each year since 1914. The amounts of the grants to the Scottish Milk Records Association shown in the table are those paid in respect of the years under which they are entered.

TABLE X. — *Grants to the Scottish Milk Records Association since 1914.*

Year	Total amount of grants to the Scottish Milk Records Association	Number of affiliated local societies	Number of herds tested	Number of cows tested
1914	1,568	36	641	26,424
1915	1,571	35	640	26,500
1916	1,174	28	529	23,000
1917	1,082	24	468	20,300
1918	1,124	22	428	18,500
1919	1,499	25	492	20,172
1920	3,100	37	586	25,120
1921	4,264	44	671	27,700

Ireland. — In Ireland the Department of Agriculture encourages the formation of cow testing associations (as they are there called) by giving them grants equal to twopence per cow per monthly test during the first year of their existence, and by supplying them with the necessary forms. The Department also employs instructors to give lectures at meetings of farmers on the objects and advantages of cow testing associations and to visit existing associations.

There were 79 cow testing associations in Ireland in 1914, hut the number fell considerably during the War, being 38 in 1915; 35 in 1916; 36 in 1917, and 30 in 1918. In 1919 the number rose to 44; the membership was 807 and the number of cows tested 9,370.

J. K. M.

ITALY.

MEASURES ADOPTED DURING THE WAR TO ENCOURAGE
AGRICULTURAL CO-OPERATION.

OFFICIAL SOURCES:

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In the early part of the War, owing the general mobilization which deprived all undertakings of their youngest and strongest employees and to the concentration of all efforts and all energies on the immediate object of preparation for carrying on the War, the co-operative movement in Italy had a temporary set-back and was almost brought to a standstill. Subsequently, however, when it became necessary to take steps to ensure the food-supply and to strengthen the economic resistance of the country, the policy followed by the Government in regard to the production and distribution of food-stuffs and to public works, agricultural credit and home colonization, contributed in no small degree to the development of co-operative distributive societies, co-operative societies for production and labour, and agricultural co-operative societies, which, already numerous in Northern and Central Italy, have spread also in Southern Italy. After the cessation of hostilities, the necessity of speeding up the resumption of the normal productive activity gave rise everywhere to new and fruitful enterprises, in which co-operation could not fail to play an important part, and thus co-operation, encouraged as it was by adequate State-aid, became a powerful instrument for the economic reconstruction of Italy. It is our present purpose to describe the different provisions which were made between 1914 and 1920 for the encouragement of co-operation. In doing so, we must group them according to the kind of co-operative society which they were intended to benefit.

§ I. PROVISIONS IN FAVOUR OF SOCIETIES OF AGRICULTURAL LABOURERS.

This group of provisions aimed essentially at encouraging a tendency which has become more and more marked in Italy in recent years — the tendency, that is, of the co-operative organizations composed mainly of labourers to devote themselves to agricultural undertakings, by acquiring land and cultivating or improving it by the labour and for the benefit of their members. It seemed to the Government that this tendency deserved to be encouraged as being of great economic value and of considerable social importance.

This movement on the part of labourers and peasants towards agricultural undertakings assumes various forms in Italy, beginning with the different kinds of limited participation in the undertaking and passing to the leasing and ownership of land, but it has attained its greatest development in the co-operative land-holding societies (*affittanze collettive*) which are one of the most characteristic forms of Italian co-operation. These are societies of agricultural labourers formed for the purpose of cultivating lands obtained, in the majority of cases, on a letting agreement, but in other cases on a produce-sharing agreement (*mezzadria, terzeria*) or even by purchase. According to the system of managing the land it is usually to distinguish between land-holding societies with divided manage-

ment and land-holding societies with combined management. The former take a considerable area of land from the owner and cultivate it by dividing it in small parcels amongst the members; in the latter, on the other hand, the members cultivate the land in common, under joint management and technical direction.

The first measures taken to encourage these societies were contained in the Decree-Law of 20 September 1917, No. 1,676 and in that of 4 August 1918, No. 1,218.

The Decree of 1917 in fact, authorized the letting by private treaty to co-operative land-holding societies (1) of cultivable lands belonging to the State, and the Decree of 1918 gave a similar authorization in respect of cultivable lands belonging to the provinces, communes and other public bodies, and laid down also that, in case of lands being put up to public competition, preference was to be given to co-operative land-holding societies when the offers made were equal. The length of the lease was not, as a rule, to exceed nine years. However, in the case of lands belonging to the State, the length of the lease might, with the approval of the Council of Ministers, be extended to a greater number of years when special obligations were imposed on the society taking the land to reclaim or improve it or to carry out other works. Under the same circumstances, the length of the lease could be extended in the case of lands belonging to public bodies, subject to the approval of the competent authorities, after consultation with the Director of Itinerant Agricultural Instruction.

For lands belonging to the State, the annual rent is payable quarterly in advance. For lands belonging to other public bodies, it is payable half-yearly in advance.

As security for payment of the rent and for the fulfilment of other obligations towards the State arising out of the agreement, the society must give caution-money equal to a quarter's rent. At the request of the society, the caution may be formed during the first two years of the lease by the payment of a proportionate additional rent.

In the case of land leased from the provinces, communes or other public bodies, the caution must be equal to a half-year's rent plus the value of the live stock (if any) on the holding and must be given in cash, or by the assignment of a savings deposit to the body which is the owner of the land, in public debt securities or in securities guaranteed by the State. At the request of the society taking the land, the caution may be given in equal half-yearly instalments extending over a period of not more than three years from the date of the agreement (2).

(1) In the Decree they are referred to as "*cooperative agricole*," an expression which is also commonly used to denote co-operative land-holding societies.

(2) The Senate in ratifying the Decree of 4 August 1918, No. 1,218 at its sitting of 19 December 1920, made considerable amendments to it, principally for the purpose of better guaranteeing the bodies who are the owners of the lands, of ensuring that no technical difficulties should be placed in the way of agricultural production and of safeguarding the organized cultivators themselves both in regard to the technical and financial capabilities of

The Decree of 4 August 1918, No. 1,218, further laid down that the provisions of that Decree itself and those of the Decree of 20 September 1917, No. 1676, should be extended to certain agricultural bodies existing in the provinces of the former Papal States and of Emilia, on condition that they would undertake to have the lands directly cultivated by their members. The agricultural bodies in question are the so-called *università agrarie*, which have been formed in various communes in Latium, in other provinces of the former Papal States and in Emilia, to exercise and to safeguard the customary rights (*usi civici*) of sowing, grazing, cutting wood, etc., for the benefit of the rural communities and to cultivate the public lands.

Apart from the taking of lands belonging to public bodies, a new and most important field of activity has recently been opened up to agricultural co-operation in the occupation and acquisition of uncultivated or badly cultivated lands.

The economic crisis occasioned by the War has, in fact, caused the idea to be more generally accepted that land should be utilized to the utmost by cultivating lands hitherto uncultivated or improving the cultivation of those which have been badly cultivated, more particularly with a view to the production of cereals. This idea took practical shape in certain provisions contained in the Decree-Laws of 2 September 1919, No. 1,633; of 22 April 1920, No. 515; of 8 October 1920, No. 1,465; of 6 September 1921, No. 1,288, and of 23 October 1921, No. 1,523, which regulate the granting of lands to agricultural associations and particularly to co-operative societies. We will describe the principal regulations now in force (1).

Lands which are uncultivated or are insufficiently cultivated, having regard to their nature, to local agricultural conditions, and to the requirements of good husbandry, may be requisitioned in favour of legally constituted agricultural associations. In order to see how this fundamental condition is ascertained, it is necessary to bear in mind the purposes and objects expressly stated in Article 1 of the Decree of 2 September 1919 No. 1,633, which are "to provide for the necessary increase of agricultural production and especially of the production of cereals, vegetables and edible tubers, and for the necessities of the agricultural population." The provisions, therefore, do not lay down punishments for negligence on the part of the occupier but order the requisition of the land for the purpose of obtaining an increase of production and of providing for the requirements of the cultivators (2).

the co-operative societies, and in regard to the fixing of equitable rents and the revision of the rents in the case of long leases. The Bill for the ratification of the Decree is now before the Chamber of Deputies, having been distributed at the sitting of 27 January 1921. (*Camera dei Deputati: Atti Parlamentari*, No. 1,189.)

(1) The provisions contained in the Decree Laws mentioned were consolidated in the Royal Decree of 15 December 1921, No. 2,047, published in the *Gazzetta Ufficiale del Regno d'Italia*, No. 25, 31 January 1922.

(2) The provisions contained in the Decree Law of 2 September 1919 No. 1,633, the object of which is to assure the maximum utilization of the national wealth and the fullest possible

The associations of which we have spoken must show that they are possessed of sufficient means and technical capacity to cultivate the lands to be granted to them and, if they are already in occupation of land, they must show that they have cultivated it in a satisfactory manner.

The period of the occupation must not exceed four years.

The bodies to which the lands are granted are obliged to commence, within the specified term, the work preparatory to sowing over the whole of the land occupied, which must not be sub-let or granted to other persons under any form of agreement whatever. If these obligations are not fulfilled the grant is cancelled.

The grant of the right to occupy the land implies the suspension of any previous agreement for the cultivation of the holding, subject to the payment of compensation for works in progress, for fruit still on the trees and for any other legitimate claim, provision being made for the payment of such compensation in the grant itself.

After the lapse of two years from the date of the decree authorizing the provisional occupation, the grantee can make application to have the right of occupation made definite, if the lands in question are "susceptible of important changes in the system of cultivation or are subject to obligations to reclaim" and if it appears that the association or body to whom they were granted has put them under cultivation in a satisfactory manner and has completely fulfilled the obligations stipulated in the grant.

yield from the land, are based on the legal principle in virtue of which the property of private individuals may be disposed of for reasons of public utility provided this is duly proved and compensation is paid. Moreover, historical precedents may be found for the Decree itself in earlier legal rules. In the exercise of the exceptional powers conferred upon it during the War, the Government had already by the Decree of 30 October 1915, No. 1,570, taken measures to facilitate requisitions in general, including requisitions of land ordered by the civil and military authorities. With regard to requisitions made by the civil authorities the Prefect was instructed to take the necessary steps by the issue of a decree in which the reasons for the action taken were explained and the drawing up of an inventory of the property to be occupied in the cases in which the circumstances arose which were contemplated by Article 7 of the Law of 20 March 1865 on the settlement of claims involving administrative bodies "when for serious reasons of public necessity the administrative authority must without delay dispose of private property." But the first decree containing special rules for the occupation of lands was that of 14 February 1918, No. 147, by which provisions were laid down for the so-called "agricultural mobilization." In this Decree the compulsory occupation of lands was contemplated not only in the case dealt with by Article 7 of the Law on the settlement of claims involving administrative bodies, but also as the sanction for the failure on the part of landowners to carry out specific improvements or other works which they had been requested to carry out. Another Decree containing similar provisions is that of 16 January 1919, No. 55, which confirmed the regulations for the organization, powers and duties of the *Opera Nazionale per i Combattenti* with which we will presently deal. The decree authorizes that body, as we shall see, by means of a special expropriation procedure, to enter definitely into possession of lands belonging either to public bodies or to private individuals, with a view to granting them to co-operative land-holding societies consisting in the main of ex-service men and to facilitate the work of improvement and settlement by rendering technical and financial assistance.

Compensation is also payable to the owner of the land and this must be fixed by the grant itself.

Lands definitely assigned to agricultural associations are granted to farmers under an occupation licence or a renewable lease with obligation to make improvements or, in so far as it may be possible, under an occupation licence with obligation to make improvements and with right to purchase.

On the expiry of the period of the occupation licence or lease the parcels of land return of right into the possession of the body or association, which arranges to make fresh grants.

The occupier who has fulfilled the prescribed conditions has a preferential right to the new grant of the holding he has occupied.

It is the duty of the prefect of the province to arrange for the requisition of land in view of temporary occupation, subject to the approval of a special consultative body — the Provincial Commission or the District Committee. The Provincial Commission is composed of the Chief Excise Officer (*intendente di finanza*), who acts as chairman; the Director of Itinerant Agricultural Instruction or another agricultural expert belonging to one of the agricultural institutions of the province; or an engineer belonging to the Cadastral Survey or the Corps of Civil Engineers; of two landowners who cultivate their own land or two farmers directly cultivating their holdings, and of two agricultural labourers, these being nominated by the Prefect after consultation with the farmers' and labourers' organizations respectively. The District Committee, formed wherever the importance of the operations and the local conditions require it, fulfils, in respect to lands within the limits of the district (*circondario*), the same functions as those assigned to the Provincial Commissions.

The definite right of occupation of which we have spoken is conferred by Royal Decree on the initiative of the Minister of Agriculture and subject to the approval of a special Central Commission which is formed by Royal Decree on the proposal of the same Minister and is composed of a Councillor of State, who acts as chairman; of two Directors-General and of a Chief of Division of the Ministry of Agriculture; of a magistrate of rank not inferior to that of Councillor of the Court of Appeal; of two agricultural experts chosen from among the officials of the Ministry of rank not lower than that of Senior Inspector or from among the instructors in agricultural schools.

Against the orders made by the prefect appeal may be made to the Ministry of Agriculture within 15 days from receiving notice of them. The appeal does not have the effect of suspending the carrying out of the order; the Minister of Agriculture, however, may suspend it for serious reasons on the advice of the Central Commission for the Granting of Lands.

The results obtained by the application of the measures indicated were certainly remarkable. The principle of co-operation succeeded in finding a wider field of experiment and of application in the cultivation of land; many farmers, hitherto ignorant of it, were brought to a knowledge

of co-operative organization ; they were compelled to study, to realize and to face difficulties and responsibilities in the management, cultivation, and working of land ; the agricultural population became interested in the various problems of production with which they now found themselves more directly faced ; in a word, a great outburst of energy took place in individual and collective labour, with beneficial results as far as the essential purpose of increasing the cultivation of food-stuffs was concerned.

Between September 1919 and April 1920, 27,252 hectares were granted to agricultural associations and agricultural co-operative societies, particularly in the provinces of Rome, Caltanissetta, Catanzaro, Reggio Calabria, Cosenza, Foggia and Bari. Tens of thousands of hectares were subsequently granted to co-operative societies in Sicily and in Latium.

But in order that the labourers' associations might be able to develop their activity to the advantage of their own members and of the national economy, it was indispensable that they should be provided with capital proportionate to the needs of their lands. For this purpose it was necessary that the credit institutions, should find, in their dealings with the associations, not less adequate security than that which the societies which undertake public contracts are able to offer. In regard to co-operative land-holding societies and to the *università agrarie*, therefore, some modifications were made by the Decree of 8 October 1916, No. 336 to the right of distraint for the enforcement of the repayment of agricultural loans (*privilegio agrario*) regulated by the Law of 23 January 1887, No. 4,276. The object of these amendments was to give to this right of distraint that character of a charge upon the land which is indispensable if it is to serve as the basis for a development of agricultural credit commensurate with the importance of the new co-operative movement. The modifications introduced are of various kinds. In the first place, the right of distraint is extended even to fruit still on the trees ; secondly, the landlord's right of distraint, if it comes into conflict with the right of distraint in respect of agricultural loans, is reduced to two years. But the most important modification consists in the prohibition, when a sale takes place, to consign to the purchaser the objects to which the right of distraint is applicable until the debt to the lending institution has been paid. Failure to observe this prohibition is a misdemeanour on the part of the debtor who sells and gives the creditor the right to make good his claim against the purchaser. The purchaser, on the other hand, is put in a position readily to ascertain the existence of the right of distraint, as, instead of this being inscribed in the register of the Registrar of Mortgages, a copy of the loan agreement by which the right of distraint is brought into being is deposited at the office of the secretary of the commune and an extract from the agreement is put up on the communal notice-board.

To these provisions regarding the right of distraint the new decree added special reductions of the duty payable in respect of loans to co-operative land-holding societies and *università agrarie*. The registration duty on the loan agreements was fixed at 12 centesimi per 100 liras of capital

lent, this being the same rate fixed in respect of loans to co-operative societies for production and labour.

The Decree of 26 July 1917, No. 1,269, laid down other new provisions for making it easier for agricultural associations to obtain credit for the cultivation of cereals, extending to credit operations of this kind the right of distraint upon goods lying in the dwelling-houses and other buildings belonging to the holding, as well as making reductions in the duty payable.

The Decree of 14 July 1918, No. 1,142, which laid down provisions for credit to the *università agrarie* of Latium, is also important. It contains rules both for enabling these bodies to obtain loans for the provision of working capital more readily and in larger measure, and for placing them in a position to enfranchise, increase and improve the collective property, authorizing the National Insurance Institution, the National Fund for Workmen's Invalidity and Old Age Pensions (now the National Social Insurance Fund), the savings-banks, the *Monti di pietà* and the ordinary and co-operative credit institutions to grant loans for the purposes mentioned notwithstanding any provision to the contrary in laws, regulations or rules. It may also be noted here that in these provisions is introduced the principle that the State shall provide guarantees to the lending institutions for the payment of the annuity charges in respect of the loans granted to the *università agrarie*.

The object of the provisions of this Decree was not only to ensure, by means of the better and more effective working of the *università agrarie* of Latium, the carrying out of the local agricultural programme and the prosperity of the individual farmers, but also to do away with conflicts and differences between landowners, farmers and labourers, and to introduce into the Province of Rome a land system more in keeping with its centuries-old traditions and with the requirements of up-to-date agriculture.

But the need of credit felt by the different types of society which we have so far described — co-operative land-holding societies, *università agrarie*, and the bodies and associations which have arisen in virtue of the special legislation relating to the granting of land to agricultural labourers — has in recent years considerably increased, owing to the strong tendency to purchase land, to the high price of land and to the high rents, as well as to the increased prices of the stock and equipment necessary for an up-to-date and intensive cultivation. The necessity on the other hand, of organizing a system of credit adapted to the particular conditions and requirements of associations of this kind which, being composed of workers of small means, had to have recourse in large measure to credit to obtain the capital necessary for taking up and cultivating land, induced the Government to create a special section of the National Credit Institution for Co-operation (of which we will speak later) known as the Land and Agricultural Credit Section (Decree-Law of 22 April 1920, No. 516) for the purpose of making loans to *università agrarie* and associations of agricultural labourers legally constituted in the form of co-operative societies or otherwise which are owners or tenants of lands or occupy

land under voluntary agreement or in virtue of the orders made by the administrative authority in the cases contemplated by the Decrees of 2 September 1919, No. 1,633, and 22 April 1920, No. 515.

The Land and Agricultural Credit Section is authorized to carry on the following business:

(a) loans for supplying working capital for the farming of land, its ordinary cultivation and the manipulation of the produce;

(b) loans for improvements and for changes in the system of cultivation;

(c) mortgage loans for the purchase of land, its enfranchisement from dues and for land improvement, up to 80 per cent. of the purchase price or of the estimated value of the land (1).

The Section has at its disposal a foundation capital of 50,000,000 liras, of which 25,000,000 liras was allocated to it by the State as a special contribution free from interest, while 15,000,000 liras were granted to it by the *Opera Nazionale per i Combattenti* and 10,000,000 liras by the National Social Insurance Fund. The State has also furnished 50,000,000 liras in the form of an advance for use in making loans for the provision of working capital and contributes to the extent of 2 ½ per cent. to the payment of the interest on the mortgage loans. When the Section has invested at least half its own capital in mortgage loans it may issue mortgage bonds up to an amount equal to ten times the aggregate capital guaranteed by the mortgages held, according to rules similar to those in force for the mortgage-bonds of the land credit institutions.

The formation of this Section, representing the definite collaboration of the State in the financing of these societies, is certainly the most outstanding fact in connection with the facilities given to them. The Section is, in fact, a sort of bank for peasants' associations and is authorized to furnish three kinds of credit — land credit, credit for making improvements, and credit for the supply of working capital.

In view of the sum fixed, it may be regarded as a first experiment which is being carried out, an experiment which is particularly important at the present time when all initiatives are highly appreciated which tend to the better solution of the land problem in the general interest of production.

Between 30 April and 31 December 1921 the Section issued to co-operative land-holding societies, agricultural associations, *università agraria* and other bodies 1,829 loans guaranteed by bills to the total amount of 110,432,930 liras and mortgage loans to the amount of 6,500,000 liras.

In general it may be said that the measures taken in favour of the co-operative land-holding societies and kindred organizations have fully achieved their object. In fact, even before the War they had attained a considerable development and they are now giving indications of becoming

(1) Similar powers were conferred by the Decree-Law of 7 June 1920, No. 775, on the Agricultural Credit Section of the Bank of Sicily in relation to the co-operative land-holding societies in Sicily.

ing general and of spreading to all the regions of Italy, from Emilia and Romagna to Lombardy, Tuscany, the Roman Campagna, Apulia, Basilicata, Sicily. The National Federation of Agricultural Co-operative Societies (Bologna) has information relating to 269 co-operative societies, cultivating a total of 79,000 hectares of land, but in this number are not included many co-operative societies of Latium, of Southern Italy, and of Sicily — about one hundred in all — also farming a considerable area of land. It is calculated that the co-operative land-holding societies directing farm undertakings are about 400, cultivating in all not less than 150,000 hectares of land (1).

By the formation of federal bodies, such as the National Federation of which we have already spoken, the Consortium of Co-operative Land-holding Societies of Bologna, the Technical Agricultural Office of the Bank of Labour and Co-operation, the Interprovincial Agricultural Federation of Milan, and the Federation of the *Università Agrarie* of Latium, the co-operative land-holding societies of all kinds of North and Central Italy, as well as the *università agrarie*, have secured, for their own benefit, that continuous and effective assistance in technical and administrative questions which is necessary for the ordinary cultivation of their lands.

With regard to the results attained, it may be said that the land taken up is usually carefully cultivated and that the gross yield has generally increased in comparison with that obtained by the former occupiers and sometimes even in comparison with the average yield in the locality.

Speaking generally, it is clear, that, notwithstanding serious financial and technical difficulties, the co-operative land-holding societies and kindred societies have now made good in Italy. It may be said that the experimental stage has been passed and that, thanks to the recent credit facilities systematically granted to them by the State, they are well on the way to becoming an important factor in the national economy whilst, by ensuring the peaceful transfer of the ownership of the land to those who directly cultivate it, in accordance with the long-standing and keen desire of this class, they are removing the possibility of conflicts prejudicial to agricultural production.

§ 2. MEASURES TAKEN IN FAVOUR OF THE CO-OPERATIVE SOCIETIES FOR PRODUCTION AND LABOUR.

These societies, which were first formed by working men, particularly by workers belonging to the building trade, more than thirty years ago, and are one of the most striking manifestations of co-operative enterprise in Italy, arose with the primary object of freeing labour from the yoke of the ordinary contractors and of directly contracting for public works (construction and maintenance of roads, bridges and canals, carrying

(1) See GORNI (Dr. Olindo): *Le "affittanze collettive"*, la loro organizzazione e i loro principali moventi. *Critica Sociale*, No. 4. Milan, 16-28 February 1922.

out drainage, reclamation, irrigation and improvement works, etc.). Favoured by the laws on public contracts, they spread rapidly, especially during the War and in the period immediately following the cessation of hostilities, when serious social and economic considerations made it clear to the Government that one of the most urgent needs of the moment was an extensive and vigorous policy of public works promptly to ensure remunerative labour for the workers released from the Army and to contribute to the reconstruction and economic betterment of the country. In the execution of this vast programme of public works, for which sums amounting to several hundreds of millions of liras were allocated, the co-operative labour societies were called upon to play a considerable part.

Better to understand the rules which govern the giving of contracts to co-operative societies, it must be premised that in Italy there are three systems of giving contracts for public works: (a) by public competition; (b) by inviting particular persons to tender; (c) by private treaty.

The most usual method is by public competition. When contracts are to be given after being publicly put up to competition, the office which has the contract in its gift must in the first place publish an announcement of the competition at least fifteen days before the day on which it is to be held. This announcement must contain a statement of the fundamental conditions of admission to the competition and of the contract. To be allowed to tender, when artistic work or works of new construction are in question, the applicant must prove his capacity by presenting a certificate signed by the prefect or sub-prefect not more than six months earlier than the date of the competition to the effect that he has given proof of skill and of sufficient practice in the execution or direction of other similar contracts for public or private works. As a guarantee of good faith, the person making the tender must deposit a provisional caution, the amount of which varies between the tenth and thirtieth part of the amount of the contract. Minute regulations govern the holding of the competition. This is the most costly and complicated system.

Private tendering takes place when those who are thought to be suitable persons are invited by special letter to present themselves at the place and time named and to make their tenders, or when a statement, describing the work to be contracted for and the general and special conditions, is sent to the persons thought to be suitable, with the request that they will sign and return it, together with an indication of the price at which they would be disposed to carry out the work.

Lastly, the contract is said to be given by private treaty when the public authority negotiates with a particular person; this is the simplest of the three systems.

We will now describe the provisions relating to co-operative societies which were laid down prior to the War and in recent years, and to which is no doubt largely due their great development.

The first law which gave facilities to co-operative societies for taking up public contracts was that of 11 July 1889, No. 6,216, introduced as an amendment to the rules relating to State expenditure. By this Law, in

fact, it was laid down that contracts for public works could be made with co-operative societies for production and labour formed by working men, either by tender or by private treaty rendering it unnecessary for them to face free competition. The Law also favoured the co-operative societies in regard to payment for the work and in regard to the deposit of caution-money. The payments had to be made by the State in instalments proportionate to the work already carried out and the caution-money was not paid at the time when the contract was signed, but was built up by retaining 10 per cent. of each instalment to be paid. This arrangement removed the difficulty which these organizations had felt in depositing the caution-money required by public authorities as a guarantee for the fulfilment of the contract made with it.

To these facilities the Law of 1889 placed two limits, one relating to the amount and the other to the nature of the contracts; it only allowed contracts to be given to co-operative societies which were of less than 100,000 liras in amount and in which manual labour was the principal factor. As the first steps were being taken on an unknown and difficult path, it was not then thought desirable to sacrifice the principle of free and open competition for contracts of an industrial nature. Indeed, at the time when the Law was passed co-operation was still in its initial stages in Italy and many doubted whether the working classes would be able to undertake to carry out public works, which required the persistent and intelligent action of a single strong management. But experience did not confirm the doubts, and by the Law of 12 May 1904, No. 178, State administrations and administrations under the supervision of the State were authorized to give contracts for works of construction or maintenance, for supplies or for public services, by tender or by private treaty up to the value of 200,000 liras and without requiring the deposit of caution money, to legally constituted co-operative societies of workmen for production and labour or to legally constituted co-operative agricultural productive societies formed by small holders. In regard to payment for the work power was given to make instalments of payment in advance.

By the Law of 19 April 1906, No. 126, the exemption from the deposit of caution-money was extended also to co-operative societies for production and labour which competed in the public competitions for contracts of a value not exceeding 200,000 liras.

These laws were followed by that of 25 June 1909, No. 422, on the consortia of co-operative societies, which encouraged the tendency which had been noticeable for some time amongst the co-operative societies for production and labour to combine in consortia in order to compete for larger contracts. This law laid down the following principles:

(1) that legally constituted co-operative societies for production and labour may combine in a consortium in order to contract with the State or other authorities for the execution of public works in any part of the Kingdom;

(2) that such works may be entrusted to consortia even by private

treaty, provided the value of the contract does not exceed twice the total amount of the contracts which might be entrusted to the separate co-operative societies forming the consortium and that the contract for any work should not exceed 2,000,000 liras.

(3) that the rules which apply to the building up of the caution-money in the case of co-operative societies shall also apply to the consortia.

The consortia are established by Royal Decree, enjoy complete independence and are placed under the supervision of the Ministry; they are corporate bodies and are subject to the rules of the commercial code in regard to their commercial operations and to all the effects which result from them.

Regulations for carrying out the laws above mentioned were issued on 12 February 1911 (No. 278). They enumerated as follows the kinds of co-operative society which were entitled to enjoy the benefit of the legislation relating to public contracts: (a) Co-operative societies for production and labour; (b) co-operative agricultural societies, such as land-holding societies, co-operative dairies, co-operative vine-growers' societies, co-operative distilleries, co-operative agricultural trading societies, co-operative societies for the sale of grain, and "any other co-operative undertaking having objects connected with agricultural production"; (c) mixed co-operative societies, which combine the objects and characteristics of some of the preceding kinds of society or set before themselves other co-operative aims.

All the prefectures of the Kingdom are obliged to ascertain the true nature and composition of the societies before they are permitted to enjoy the advantages which the law confers upon them. For this purpose there exists at each prefecture a register, known as the prefectural register of co-operative societies, in which are noted the most characteristic features of the societies which are considered to be entitled to compete for public contracts.

The Regulations referred to also govern the supervision of the co-operative societies to which they relate. The supervision is in the hands of the State and is entrusted to Provincial Commissions of Supervision, which are composed of the prefect, who acts as chairman, of public officials and of members nominated by the co-operative societies inscribed in the prefectural registers, and to the Central Commission for Co-operative Societies, which is invested with ample powers in all matters relating to co-operation and has in relation to the consortia of co-operative societies the same attributions as the Provincial Commissions have in relation to the individual societies.

Amongst the measures taken in recent years, the Decree of 6 February 1919, No. 107 (modified by the Royal Decree of 12 February 1922, No. 214), is of great importance; it reformed the system of public contracts in order to give it more rapidity and adapt it to the exigencies of the moment. It increased to 5,000,000 liras the maximum value of the works which could be entrusted to consortia of co-operative societies, and

authorized that even this limit might be exceeded when, on the advice of the Superior Council of Public Works, the administration was of opinion that the consortia offered sufficient technical and financial guarantees.

By the Law of 26 September 1920, No. 1,313, the maximum limit for the contracts for execution of public works which could be given to individual co-operative societies was increased to 1,000,000 liras.

The Law of 26 September 1920, No. 1,495 must also be mentioned; to give facilities to co-operative societies for production and labour and to their consortia for obtaining the credit necessary for the execution of works or supplies in respect of which they had entered into contracts with the State, it authorized the banks of emission to re-discount for the National Credit Institution for Co-operation bills up to the amount of 100,000,000 liras, at a rate equal to the ordinary rate of discount. This Institution was thus put in a position to satisfy the numerous requests for credit addressed to it from all parts of Italy by co-operative building, manufacturing or agricultural societies, etc.

For the same purpose of giving the co-operative societies for production and labour facilities for obtaining credit for the execution of public works, the Federal Credit Institution for the Revival of Venetia was authorized by the Royal Decree of 3 June 1920, No. 859, to make advances to the National Credit Institution for Co-operation up to the amount of 30,000,000 liras, to be applied to making loans in respect of works contracted for in the Venetian provinces, where it was necessary to provide for giving the greatest possible impulse to works of reconstruction and for the repair of property damaged by the war (1).

We shall see presently that the capital at the disposal of the National Credit Institution for Co-operation was considerably increased by other provisions.

By the increase in the maximum amount of the contract on the one hand and the credit facilities on the other, the co-operative societies, which were also favoured by the provisions made in the Royal Decrees of 28 November 1919, No. 2,405, and 1 February 1920, No. 189, to lessen unemployment and to increase the national production, were enabled considerably to extend their operations.

At the end of January 1922, there were in Italy 63 consortia of co-operative societies, legally constituted within the terms of the Law of 25 June 1909, No. 422, which grouped together the most important bodies in this field. To these must be added some federal bodies not established in the form of consortia according to the rules of the law mentioned.

For some of the consortia of co-operative societies we give figures showing the value of the works carried out and the works in progress

(1) To facilitate reconstruction in the districts devastated by the War by works of which the execution was entrusted to co-operative societies or to the consortia contemplated by the Decree-Law of 28 November 1920, No. 1,766, the Federal Institute of Credit for the Revival of Venetia was authorized by the Royal Decree-Law of 3 April 1921, No. 573, to make advances to the National Credit Institution for Co-operation up to the amount of 10,000,000 liras.

in the years 1920 and 1921: Bologna Consortium of Co-operative Societies for Production and Labour: works carried out in 1920, 17,000,000 liras (including works directly carried out, 4,860,000 liras, and works carried out by the affiliated co-operative societies, 12,500,000 liras); in 1921, works directly carried out, 5,368,000 liras, and works carried out by the affiliated co-operative societies, 13,000,000 liras. Reggio Emilia Consortium of Co-operative Labour Societies; work carried out between 1919 and 1921, 18,500,000 liras. Florence Consortium of Co-operative Societies for Production and Labour; in 1920, works carried out, 5,980,000 liras, and works in progress, 12,460,000 liras; in 1921, works carried out, 12,541,000 liras, and works in progress, 27,340,000 liras. Naples Consortium of Co-operative Societies for Production and Labour: works in progress in 1921 directly carried out, 10,092,418 liras and carried out by affiliated co-operative societies, 5,972,608 liras. Ravenna Federation of Co-operative Societies for Production and Labour: works carried out in 1921, 11,237,627 liras. Genoa Federation of Co-operative Labour Societies, works directly carried out in 1920, 7,829,000 liras, and works carried out by affiliated co-operative societies, 1,229,000 liras; in 1921, works in progress, about 8,000,000 liras. Arezzo Consortium of Co-operative Societies for Production and Labour: works in progress in 1921, 8,000,000 liras. Pisa Consortium of Co-operative Societies for Production and Labour: works in progress in 1921, 8,000,000 liras. Venetia Co-operative Association: works directly carried out in 1921, 7,500,000 liras. Carnia Consortium of Co-operative Societies for Production and Labour (Tolmezzo): works carried out between 1909 and 1921, 41,566,000 liras.

Other important organizations which, however, were not formed under the Law of 25 June 1909, No. 422, are the Milanese Federation of Co-operative Societies for Production and Labour which in the year 1920-21 carried out directly works to the amount of 5,764,769 liras and to the amount of over 10,000,000 liras through the medium of the affiliated co-operative societies; the Latium Federation of Co-operative Societies for Production and Labour, which has works in progress to the amount of about 15,000,000 liras; the Pavia Federation of Co-operative Societies for Production and Labour, etc.

From information collected it appears that at the end of 1920 the co-operative labour societies and their consortia which were directly obtaining credit from the National Credit Institution for Co-operation numbered 1,034 (or, if the affiliated bodies be included, 1,621), contained 286,000 members and possessed capital and reserves amounting to about 30,000,000 liras; they had works in progress, under contract with the State, with communes, with provinces and with private individuals to the amount of over 670,000,000 liras; they possessed plant and materials to the value of about 230,000,000 liras, and they had paid wages amounting to more than 216,000,000 liras.

The extent to which co-operation has been applied to the execution of works in Venetia is noteworthy. Up to 31 December 1920, out of

works to the amount of 500,000,000 liras for the reparation of war damages to the property of private individuals and of public bodies, works to the amount of fully 200,000,000 liras had been entrusted, with excellent results, to co-operative societies and their consortia, and the figure has since been considerably increased. Before the War there were a hundred co-operative societies in that region; at present there are more than 600 and they include between 70,000 and 80,000 workers, with technical direction and administrative organization, grouped in federations and assisted by credit institutions.

Figures such as these, while they show that the encouragement given to this characteristically Italian type of society has had the most beneficial results, prove also, at the same time, that co-operative organization is one of the systems best adapted for solving, at any rate partially, the problems of labour.

§ 3. PROVISIONS IN FAVOUR OF CO-OPERATIVE SOCIETIES FORMED OF EX-SERVICE MEN.

The gradual return of the service men to the economic and social life of the country was from the beginning accompanied by a decided tendency on their part to adopt co-operative methods by which they hoped to be able to assure a profitable resumption of labour to all those who had been obliged to interrupt their normal work. This movement, which quickly became so general and persistent as to assume a quite special importance, received a strong impulse and support from a series of measures taken by the Government in favour of the service men, conspicuous amongst which are those for the formation of the *Opera Nazionale per i Combattenti*, for the granting of free insurance policies to ex-service men and for authorizing loans for productive purposes on the security of these policies. In examining these provisions we shall see the manifold advantages which this new group of co-operative associations derived from them.

The *Opera Nazionale* was formed by the Lieutenantcy Decree of 10 December 1917, No. 1,970, for the purpose of "making provisions for giving economic, financial, technical and moral assistance to ex-service men" by methods which, while they afford the greatest possible benefit to individuals, will also serve "to promote the technical, economic and civil conditions which will enable the labour forces of the nation to have the greatest possible productivity." It is a corporate body, under independent management, and has a capital composed of a foundation capital of 300,000,000 liras, the net returns on the working, and legacies and donations from individuals or corporations; it also has at its disposal all the funds which the State Treasury allocates to it for making loans on insurance policies.

The *Opera Nazionale* is managed by a Council composed of nine members, nominated by Royal Decree, on the proposal of the Minister of the Treasury, after consultation with the Council of Ministers. At least four members of the Council must be chosen from among citizens who are not

officials of public administrations and who have given proof of considerable technical and administrative capacity in the pursuit of agriculture or of some branch of industry or commerce. The *Opera* is supervised by a group of three auditors nominated by the Ministry of the Treasury.

The organization and duties of the *Opera Nazionale* are laid down by regulations which were approved by the Lieutenantcy Decree of 16 January 1919, No. 55, and its work is carried out along three distinct lines: (a) agricultural, (b) social, and (c) financial.

The work along agricultural lines, which is of special interest to us, is directed:—

(a) to form a large landed property by means of the lands acquired by the *Opera*, the public lands belonging to the State, to the provinces, to the communes, to benevolent institutions, to public bodies and to the ecclesiastical bodies which were not dissolved, and the lands belonging to private owners which are subject to the obligation of reclamation or which may be susceptible of important changes in the system of cultivation;

(b) to develop this property by carrying out all the works which may be necessary for that purpose;

(c) to colonize it.

As for the public lands belonging to the State or to the other bodies mentioned when they are declared by a Central Arbitration Board, sitting at Rome and composed of two superior magistrates, a Councillor of State, the Director-General of Agriculture and the Director-General of Labour and of Thrift, to be susceptible of important changes in the system of cultivation, or when they are subject to the obligation of reclamation, they are transferred, by an order of the Arbitration Board itself, to the *Opera Nazionale*. Other rural property belonging to the same bodies the *Opera* may apply to take in emphyteusis or on long lease.

As to the lands belonging to private owners and in the condition described, the Central Arbitration Board, following a special procedure which has been laid down with a view to safeguarding the interests of those having rights in them, authorizes their transfer to the *Opera Nazionale* and their immediate occupation by it.

If it is possible to carry out important changes in the system of cultivation of these lands, the *Opera Nazionale*, having obtained the order transferring them, proceeds to execute the necessary work (1).

For the purpose of bringing the land so acquired under cultivation, the *Opera Nazionale* may undertake or contract for the execution of public works, availing itself as far as possible of the labour of service men. It has a right of preference over any other body, or society or firm or consortium.

In connection with our present inquiry, Article 25 of the Regulations

(1) To the former owner is reserved the right of buying back the improved property by paying the price received, plus the increased value, on condition that he assumes certain obligations in respect of the future utilization of the land.

is of some importance. According to this article the *Opera Nazionale* may provide for the execution of the works above referred to and the works for the reclamation of the lands acquired as above described, in whatever manner they may have become its property, not only directly but by entering into contracts for the execution of all or part of such works with co-operative labour societies, consortia, companies or firms which, besides offering the necessary technical and financial guarantees, pledge themselves to give preference in the execution of the works entrusted to them to workers who were formerly service men. The *Opera Nazionale* may also promote the formation of such bodies or take shares in them or supply them with capital and with the necessary technical means.

Even more important is the principle laid down in Article 26 of the Regulations under which the lands which have become the property of the *Opera Nazionale*, if they can be immediately cultivated, even if it be only with the technical and financial assistance of the *Opera Nazionale*, must be granted to service men who will directly cultivate them or to co-operative societies of agriculturists who are mainly service men, either under a renewable lease with obligations to effect improvements or under an occupation licence with obligations to effect improvements and right to purchase. Lands in respect of which important improvement works have had to be carried out or important changes in the system of cultivation have had to be made may also be granted, under an occupation licence, to co-operative labour societies which have carried out works for bringing the property of the *Opera Nazionale* under cultivation, but preference must always be given to individual service men or to co-operative societies of agriculturists who are mainly service men.

In the agricultural year 1920-21 lands containing 17,182,7627 hectares were granted to co-operative societies for ordinary cultivation. Of these 9177,7019 hectares were in Sicily; 4758,8467 hectares in Latium; 1580,6890 hectares in Calabria; 640,2384 hectares in Basilicata; 590,6593 hectares in Apulia; 408,5484 hectares in Campania, and 26,0790 in Umbria. With these co-operative societies and with others which may apply for grants of land agreements will be entered into giving occupation licences with obligations to effect improvements and with right to purchase as soon as they proceed to the division of the lands.

The *Opera Nazionale* also promotes the creation of agricultural colonies and new villages settling in them mostly agriculturists who are ex-service men; it encourages the formation of co-operative societies and agricultural associations composed mainly of ex-service men; it directs and supervises the cultivation of lands and the carrying out of land improvement works; it promotes associations and institutions "which aim at securing the solidarity of the cultivators" in purchase, in sale, in insurance, in the manipulation of agricultural produce, and in the pursuit of the small industries auxiliary to agriculture; it supplies credit, directly or through the medium of organizations to which it delegates its powers, to occupiers of land for making agricultural improvements and changes in the system of cultivation, granting long term loans repayable

by instalments, and facilitates the granting of credit for the acquisition of machinery, implements, live stock, etc., by the institutions authorized to give such credit, to agriculturists who are ex-service men and to co-operative societies which it may have placed in occupation of lands belonging to it; lastly, it gives financial and technical assistance in the exercise of the customary rights (*usi civici*) and in the cultivation of the public lands (*beni di dominio collettivo*), for the enfranchisement of lands burdened by customary rights, for the settlement of lands formerly so burdened which have not been improved and which are susceptible of important changes in the system of cultivation, and in general for the utilization of the lands occupied by communities and agricultural associations.

As may be seen, the principle followed in the provisions which we have described concerning the agricultural section of the *Opera Nazionale* is clearly that of co-ordinating, for the benefit of the ex-service men and of the co-operative labour societies and co-operative land-holding societies, the indispensable factors for the better cultivation of the land, namely labour, technical capacity and capital, in the interest both of the individual and of the community.

In October 1921 the landed property of the *Opera Nazionale* was of a total area of 37,457.7914 hectares, which was thus divided: lands assigned to it by orders of the Central Arbitration Board, 27,969.6343 hectares; lands acquired by private treaty, 2,443 hectares; Crown lands, 7045.1571 hectares.

It may here be noted that the Committee of Management of the *Opera Nazionale*, with the object of extending to the greatest possible number of peasants the benefits arising from the assignment of the Crown lands to it by the Decree-Law of 3 October 1919, No. 1,792, has decided to sell such of these lands as are best adapted for sub-division into small holdings, and to apply the proceeds, which it is estimated will amount to about 3,000,000 liras, to provisions of a social character for the exclusive benefit of ex-service men.

The object of these provisions is to give them facilities for acquiring land, however it may have come into the possession of the *Opera Nazionale* and to make it more advantageous for them to do so.

It has been decided, in the first place, that the grant to peasants who are ex-service men of all these lands, which will normally take the form of agreements for occupation with obligation to effect improvements and with right to purchase, shall be made at cost price, without increase of any kind for expropriation expenses or for general or administrative expenses, and without any charge in connection with the agreement itself.

The period during which the holding is being improved must not exceed five years and during this period the rent payable will not exceed three per cent. of the selling price of the holding while the taxes will be paid directly by the *Opera Nazionale*.

Apart from all other State-aid and facilities, special premiums are offered to encourage the erection of buildings on the holdings. The *Opera Nazionale*, moreover, besides assisting the peasants who are ex-

service men to take advantage of the provisions contained in the special laws relating to the erection of dwelling houses, will prepare designs of various types of such houses and will distribute them widely.

When the improvements have been carried out, the holding will be definitely transferred to the occupant, subject in certain cases to the right of the former owner to buy it back. At least 25 per cent. of the price must be paid when the land is transferred. The remainder may be paid in five years, by annual instalments of capital together with interest at 3 per cent. Even the insurance policy with which the ex-service men are provided can, after the initial payment of 25 per cent., be assigned as security for a part of the price and in this case it will be taken at its full nominal value, and the purchaser will only be under the obligation to pay interest at three per cent. until the policy matures. The lots sold will be mortgaged in favour of the *Opera Nazionale* as security for the exact fulfilment of the obligations assumed.

In the case of grants made to co-operative societies composed of ex-service men, the advantages described will be applicable only to peasant members who are ex-service men.

As to the sale of the lands formerly belonging to the Crown from which, as we have mentioned, the means are to be derived for conferring the advantages above indicated, the Committee of Management of the *Opera Nazionale* has decided that such lands shall be sold only to peasants who are ex-service men, either as individuals or as members of co-operative societies, at preferential prices fixed in advance on the basis of certain considerations, such as capacity for work, size of family, the fact of being already a cultivator of land, etc.

The *Opera Nazionale* is thus carrying out one of the most important functions attributed to it by its Regulations, that of providing for the formation of a large landed property for the purpose of granting it to those who will directly work it, giving always an absolute preference to individual ex-service men or to co-operative societies mainly consisting of ex-service men.

A very effective impulse has also been given by the *Opera Nazionale* to the co-operative movement amongst ex-service men by granting loans on the security of the insurance policies given to them by the Lieutenantcy Decree of 10 December 1917, No. 1,970, to which we have already referred.

This Decree authorized the National Insurance Institution to issue the following policies, completely free from any obligation to pay premiums, in favour of soldiers and non-commissioned officers of combatant units:

(a) for a capital of 500 liras in favour of soldiers and for a capital of 1,000 liras in favour of non-commissioned officers, payable immediately after the death of the insured person if he were killed in action, or died of wounds received in action or from illness due to war service;

(b) for a capital sum of 1,000 liras in favour of all soldiers and non-commissioned officers belonging to combatant units, payable: (1) immediately after the death of the insured persons if this happened during the War

and was due to causes which did not give the right to the payment of a capital sum in lieu of the war pension: (2) immediately after the death of the insured persons, if that occurred within 30 years from the date of the policy: (3) in any case, the capital sum was payable to the insured person at the end of 30 years from the date of the policy, if he were still alive.

In Article 4 of the Decree it was laid down that after the conclusion of the War, the insured persons should have the right, not less than three months from the date of demobilization, to ask for the payment in advance of the sum of 1,000 liras assured by the mixed policy, with the proviso "that it should be invested in instruments of production and of labour and that adequate security should be given."

This provision was intended to render it easier for the demobilized service men to resume their work, to bring about the revival of the small productive industries carried on by individuals, and to increase the national production.

As the policies in question were mixed policies, the sum assured being payable on the death of the insured person or at the end of thirty years, it is clear that by payment in advance the legislature intended a loan upon the security of the policy.

By the Decree of 7 March 1920, No. 283, rules were laid down for the granting of such loans. They are given by the *Opera Nazionale* either directly or through the medium of credit institutions or savings banks authorized by it. The loans are granted on the following conditions:

(a) that the policy shall be assigned to the *Opera Nazionale* or to the lending institution;

(b) that the sum applied for shall be invested in instruments of production or of labour;

(c) that the insured person shall undertake to repay the sum within a period to be determined according to the return which may be expected from the investment made.

The amount of the advance may be as much as the nominal value of the policy; in that case that part of the sum which corresponds to the actual or surrender value of the policy (which in the current half-year is 345 liras) is fully covered, and for the balance, up to 1,000 liras, the operation is one of personal credit, specially guaranteed.

The *Opera Nazionale* or the lending institution may for this purpose require that a promissory note shall be given and may provide that the instruments of production or of labour in which the sum advanced is invested shall remain its own property, to the extent to which it is greater than the actual value of the policy, until such time as the loan is fully repaid.

During the five years following the date on which the Decree entered into force, interest on the loans will be paid by the insured persons at a rate not exceeding 3 per cent. Whatever interest may be payable beyond 3 per cent. will be paid by the *Opera Nazionale*, but towards this the Treasury will contribute not more than 1 per cent.

But besides the system of advances made to individuals on the secur-

ity of the policies, there is that of advances on the security of policies assigned to co-operative societies as an addition to their share capital, a system which has great economic utility. The policies may be assigned to co-operative land-holding societies, co-operative societies for production and labour, co-operative credit societies or co-operative distributive societies. In doing so, the members transfer to the co-operative society those means of obtaining credit which they themselves have by reason of the policy; in return for this, the members are given shares of a value equal to the advances received by the society on their respective policies. These shares are subject to a lien until the member has paid for them.

When the insured person fails to fulfil the obligations assumed in respect of the loan granted to him, the *Opera Nazionale* or the lending institution will have the right to surrender the policy. In this way the lending institution has the certainty of being able to recover the money lent, at any rate up to the amount of the surrender value of the policy, the risk being confined to the balance over and above that value. In cases in which the insured person dies before having completely repaid the advance, the *Opera Nazionale* will be paid the balance due out of the capital sum payable at death.

All documents relating to these loans are exempt from the payment of duty.

The want of sufficient share capital and the difficulty of obtaining credit are, for newly-formed co-operative societies, the obstacle most serious and most difficult to overcome, but by means of the assignment of insurance policies by the members to the society and the advances made upon them, the obstacle may be in a large measure overcome, with the further advantage to the society of being able to obtain credit on preferential terms as far as the rate of interest is concerned (3 per cent.); hence the great economic importance of the measure.

In almost all cases the *Opera Nazionale* acts through organizations to which it delegates its powers, reserving to itself the functions of direction and of supervision. In this manner, while an undesirable and cumbersome centralization is avoided, it is possible to utilize for advances on the security of the policies the funds which the credit institutions and savings banks will think fit to devote to that purpose in consideration of the lofty social aims which it is sought to attain by these transactions, or of the special guarantees which they offer.

Up to the end of December 1921 advances were made on the security of policies by the authorized institutions to the amount of about 155,000,000 liras, of which more than 140,000,000 liras were granted to individuals and more than 15,000,000 liras to co-operative societies.

The *Opera Nazionale* has, moreover, deemed it necessary to encourage the granting of credit to co-operative societies of ex-service men, even beyond the value of the policies, in all cases in which the advances proved to be insufficient.

Now in view of the impossibility of creating locally an adequate

financial organization of its own, it delegates this function to the institutions which ordinarily carry on co-operative credit business, making suitable agreements with them. And since it may happen that such institutions do not always have at their disposal the financial means required for complying with the numerous applications for credit, it supplies the necessary capital to them.

Another way, not less important, in which the *Opera Nazionale* gives credit facilities to co-operative societies of ex-service men is by contributing to the payment of the interest due by them upon advances obtained, otherwise than upon the security of policies, from other credit institutions. The co-operative societies for production and labour which are mainly composed of ex-service men may apply for this contribution, which must not exceed 2 per cent.

Lastly, the *Opera Nazionale* directly supplies credit, otherwise than on the security of policies, to those co-operative societies which, though able to offer the necessary guarantees, do not succeed in obtaining credit from the institutions to which the *Opera Nazionale* has delegated its powers. In all such cases, the *Opera Nazionale* reserves the right to exercise, by means of representatives, the fullest supervision over the technical and administrative working of the societies financed.

The many forms of encouragement given by the *Opera Nazionale* to co-operative societies which we have here briefly described and those which, for sake of brevity, we omit to mention are all based on the provisions of the regulations which govern its working, and it is accordingly to these provisions that the development attained by the co-operative societies of ex-service men is largely due.

From a recent inquiry made by the *Opera Nazionale* it appears that up to the end of September 1921 it gave assistance, through the medium of the local organizations to which it delegated its powers (*Uffici provinciali di assistenza*), to 1,137 legally constituted co-operative societies, containing 178,967 members, of whom 147,431 were ex-service men. These 1,137 co-operative societies may be classed as follows: 364 co-operative societies for production and labour, containing 27,132 members, of whom 22,136 were ex-service men; 113 co-operative land-holding societies, 80 of which contained 15,762 members, of whom 13,318 were ex-service men; 438 co-operative distributive societies, containing 94,804 members, of whom 78,756 were ex-service men; 134 mixed co-operative societies, containing 40,480 members, of whom 32,640 were ex-service men. Of the co-operative land-holding societies almost all were for the purpose of cultivating land on the system of separate management; the most successful societies are those which have been formed in the provinces of Padua and Treviso, and in some districts in Emilia, Tuscany and Latium.

The co-operative societies above enumerated are distributed according to regions as follows:

Venetia, 183 societies. The movement is on the whole in a satisfactory condition.

Abruzzi and Molise, 118 societies. The movement is developing in the provinces of Aquila and Chieti.

Sicily, 118 societies.

Apulia, 103 societies. The most successful societies are found in the province of Bari and in the district of Taranto.

Calabria, 95 societies.

Sardinia, 82 societies. The movement is fairly successful in regard to co-operative distributive societies and is making progress in regard to co-operative societies for production and labour.

Lombardy, 81 societies. The movement is strongest in the provinces of Milan, Cremona and Mantua.

Latium, 72 societies of varying strength.

Tuscany, 62 societies. The best societies are found in the provinces of Florence and Grosseto.

Campania, 50 societies.

Emilia-Romagna, 47 societies. The movement is soundest in the provinces of Bologna and Parma.

Piedmont, 31 societies. The movement is strong in the province of Turin.

The Marches, 28 societies. The movement has made most progress in the provinces of Ancona and Pesaro.

Basilicata, 24 societies.

Umbria, 20 societies. The movement is making progress.

Liguria, 18 societies. The co-operative labour societies are well developed in the province of Genoa.

Venetia Julia, 5 societies. The movement is only in its initial stages.

Besides the 1,137 to which, as we have said, the *Opera Nazionale* renders assistance, it is calculated that there are about 400 other societies of the kind, so that it may be estimated that there are approximately 1,500 legally constituted co-operative societies in which the number of ex-service men is at least a bare majority of the total number of members.

§ 4. PROVISIONS RELATING TO THE NATIONAL CREDIT INSTITUTION FOR CO-OPERATION.

The National Credit Institution for Co-operation (Rome) was founded by the Royal Decree of 15 August 1913, No. 1,140, for the purpose of providing credit for legally constituted co-operative societies of all kinds and their consortia, also legally constituted (1). The Bank of Italy, the National Fund for Workmen's Old Age and Invalidity Pensions (now called the National Social Insurance Fund), the Credit Institution for Co-opera-

(1) The Institution is governed by the provisions of the Law of 7 April 1921, No. 1,073, and by rules approved by Royal Decree of 19 February 1922, No. 253, replacing those approved by the Royal Decree of 15 August 1913, No. 1,140, the Lieutenantcy Decree of 7 March 1918, and the Royal Decree of 4 March 1920.

tive Societies (Milan) and the principal ordinary savings banks all contributed to form the foundation capital of 7,750,000 liras. To the original contributors were subsequently added the National Fund for the Insurance of Workmen against Accidents during their Work, the Bank of Naples, the Bank of Sicily and several popular banks. At the end of 1920 the capital reached a total of 20,840,000 liras, together with a reserve fund of about 500,000 liras.

In recent years the need of credit felt by the Italian co-operative societies has steadily increased, as they have assumed an ever-growing importance in the national economy. Various measures were therefore taken to increase the means at the disposal of the Institution and place it in a position better to accomplish its task.

By the Decree of 24 July 1919, No. 1,459, the Treasury was authorized to make advances to the Credit Institution at 4-per cent. interest up to a total of 30,000,000 liras, to enable it to supply to co-operative distributive societies and their consortia, as well as to the semi-official independently-managed distributive associations (*enti autonomi di consumi di carattere pubblico*) to acquire and to preserve articles of primary necessity and to distribute them to the consumers at moderate prices. By the same decree a sum of 20,000,000 liras was set aside for loans to co-operative distributive societies for the installation of plant for the production, manipulation and distribution of food stuffs, but this fund was not employed for its original purpose and was afterwards, by the Decree of 7 November 1920, No. 1,599, likewise allocated to the granting of loans for the purchase of articles of primary necessity.

Speaking of the measures taken in favour of the co-operative societies for production and labour, we have mentioned the Decree of 3 June 1920, No. 859, by which the Federal Credit Institution for the Revival of Venetia was authorized to grant to the National Credit Institution loans up to a total of 30,000,000 liras to facilitate in the Venetian provinces the work of reconstructing and repairing the property damaged by the War, as well as the Law of 26 September 1920, No. 1,495, which authorized the banks of emission to rediscount for the National Credit Institution, bills to a total amount of 100,000,000 liras drawn by co-operative societies for production and labour and their consortia and guaranteed by the assignment of orders to pay issued by the public administrations with which they had entered into contracts, in accordance with the terms of the Law of 25 June 1909, No. 422.

By the Law of 7 April 1921, No. 456, the capital of the National Credit Institution was increased by 200,000,000 liras by payments to be made to it by the State.

Other measures related to the constitution of the Institution. Thus by the Decree of 23 March 1919, No. 455, an independently managed section was established for supplying credit for building purposes, with a foundation capital of 30,500,000 liras.

This Section finances the co-operative building societies and the independent housing institutions in two ways — by means of loans which

serve to supply, during the course of the construction, the capital necessary for the work and by means of mortgage loans which are granted when the work is completed. Loans of the first kind are made out of the foundation capital; to obtain funds for making the mortgage loans, which are repayable in 50 years, it must have recourse to the issue of bonds, of the value of 500 liras each, guaranteed by first mortgage, which it is authorized to issue to the amount of eight times its owned capital.

Subsequently, by the Decree-Law of 22 April 1920, No. 516, a new independently managed Section was created for land and agricultural credit, for the purpose, as we have had occasion to note when dealing with the measures taken in favour of the agricultural labourers' societies, of encouraging the tendency shown by these societies not only to rent land, but also to purchase it. This tendency showed the necessity of more systematic efforts on the part of the National Credit Institution to aid this form of co-operation, which had shown itself to be an effective instrument for intensifying production.

Including the two sums allocated for the Building Section and the Agricultural Section, the capital of the National Credit Institution now exceeds 300,000,000 liras and this capital enables it to carry out a programme of financial assistance which responds more fully to the growing needs of the co-operative movement.

By the Decree of 31 July 1921, the composition of the Committee of Management of the Institution was modified. It will include 15 members, of whom five will be nominated from amongst their own officials by the Ministries of Labour, of Industry and Commerce, and of Agriculture (one for each Ministry) and by the Ministry of the Treasury (two members), five will be nominated by the institutions which have contributed to the capital, and five will be representatives of the co-operative societies.

The Institution in the seven years that it has been at work has steadily increased its business. It has opened branches and agencies in the principal centres of the co-operative movement and has helped to encourage the spread of co-operation in Southern Italy.

Credit is supplied by the Institution to every kind of co-operative society, but particularly to co-operative societies for production and labour, co-operative distributive societies and co-operative land-holding societies.

To co-operative societies for production and labour credit is granted principally in the form of advances secured by the assignment of orders to pay issued by public administrations with the guarantees and according to the rules laid down by the Laws of 25 June 1909, No. 422, and 26 September 1920, No. 1,495.

Credit is granted to co-operative distributive societies by means of bills guaranteed by the right to levy distress on the goods belonging to them, in accordance with the provisions of the Decrees of 26 May 1918, No. 723, and 24 July 1919, No. 1,459.

To co-operative societies for the construction of cheap houses mortgage loans are granted at preferential rates of interest, exempt from the tax

on personal property. The State also contributes towards the payment of the interest (Consolidating Law of 30 November 1919, No. 2,378).

To co-operative land-holding societies loans secured by the right to levy distress on ungathered fruit and on live and dead stock are granted for supplying working capital (Decrees of 8 October 1916, No. 1,336, and 26 July 1917, No. 1,269) and mortgage loans for the purchase of land, for the enfranchisement of land from dues and charges, and for land improvement (Decrees of 22 April 1920, No. 516, and Regulations of 14 November 1920, No. 1,793).

Besides the transactions above described, the Institution rediscounts the bills discounted by other co-operative credit institutions or by other institutions which make advances to co-operative societies, grants loans secured by the deposit of securities and the assignment of credits, and, in exceptional cases may grant direct loans to co-operative societies for which bills have already been discounted and which have worked satisfactorily for at least three years.

The National Credit Institution accepts deposit on current account or in exchange for interest-bearing bonds. The deposits are not used for the ordinary transactions, but are invested in State securities, in securities guaranteed by the State or in land bonds.

Having thus indicated the measures taken regarding the National Credit Institution, we give some statistics of its work between 1914 and 1920.

For all transactions with the Institution, the co-operative societies must draw bills which fall due at the time when the transaction is to be closed. The following table indicates the total number and aggregate amount of such bills discounted in each year.

TABLE I. — *Number and Amount of the Bills Discounted in each year from 1914 to 1920.*

Year	Number of bills	Amount
	discounted	of bills discounted
		liras
1914	5,091	15,477,601
1915	12,582	42,802,768
1916	14,441	56,883,256
1917	15,924	89,084,564
1918	18,643	162,036,915
1919	25,583	310,079,093
1920	54,271	885,000,599

The amount of bills discounted in 1920 (885,000,599 liras) was thus distributed amongst the different parts of Italy: Northern Italy,

627,614,894 liras; Central Italy, 192,701,773 liras; Southern Italy, 64,683,932 liras.

The bills in hand at the end of the year 1920 amounted to 357,175,156 liras.

The total amount of the bills discounted in the seven years was 1,561,367,698 liras.

The transactions of the Institution are distributed amongst the different kinds of co-operative society in the manner shown in the following table.

TABLE II. — *Distribution of the Transactions amongst the Different Kinds of Co-operative Society.*

Year	Co-operative societies for production and labour and their consortia	Agricultural co-operative societies and their consortia	Co-operative distributive societies and independently managed distributive associations	Co-operative credit banks and intermediary institutions	Miscellaneous co-operative societies
1914	10,371,933	338,220	148,517	4,519,722	98,992
1915	31,402,452	1,314,799	1,256,737	5,400,085	3,428,695
1916	43,150,140	2,263,849	1,841,416	4,824,360	4,805,490
1917	65,721,405	4,380,296	12,869,022	4,726,136	1,387,704
1918	99,458,767	15,423,402	39,855,025	5,932,786	1,366,935
1919	147,603,095	41,869,527	105,158,692	3,402,292	8,966,225
1920 (1) . . .	428,299,147	132,228,600	230,654,332	46,820,090	10,783,734

(1) In 1920 transactions were also carried out with co-operative building societies and institutions for the construction of cheap dwellings to a total of 36,214,694 liras.

At the end of 1920 the number of societies which had received loans was 5,864 which were thus classified: 3,180 co-operative distributive societies; 1,621 co-operative societies for production and labour; 842 co-operative land-holding societies, and 221 miscellaneous co-operative societies.

These figures give an idea of the extent to which the Institution has developed in a few years and of the importance of the work accomplished.

It may be affirmed that if the Italian co-operative movement has been able to pass safely through so difficult a period, this is due in large part to the work of the National Credit Institution which with foresight and courage supported the soundest of the co-operative institutions in their efforts to maintain themselves in working order. This is particularly the case in regard to the co-operative societies for production and labour which the Institution supported by raising the limit of the loans granted so as to enable them to face the increased cost of labour and of materials, by providing with technical direction and administrative aid those co-op-

erative societies which had remained without direction as a result of the mobilization of their staffs, and by placing them in a position to devote their work to the needs of the War period.

The Institution has also endeavoured to perfect the working, from a technical point of view, of the co-operative societies. The efforts which have been made in this direction have taken various forms, such as the appointment of inspectors or the establishment of offices for the inspection of co-operative societies, with a view to supplying to the societies technical advice and assistance in regard to management and book-keeping; the formation of consortia and federations for the purpose of co-ordinating and completing the work of a particular class of co-operative society in different regions, and the organization of courses of instruction for imparting to co-operators the fundamental notions of book-keeping and of the laws relating to co-operation. We may instance the Inspection Office for Co-operative Land-holding Societies of Bologna, which assisted the societies in the choice of land to rent or to buy, in the purchase of stock and equipment and in deciding upon the crops to cultivate, and watched over the employment of the credit granted by the National Credit Institution. It was this Office, in turn, which formed the National Federation of Agricultural Co-operative Societies which now carries on the same work.

Two other Agricultural Inspection Offices with similar objects were formed at Venice and at Mantua and the Office for the Inspection of the *Università Agraria* of Latium was formed in Rome.

A special office was also established in Rome for the supervision of co-operative societies and distributive associations (*enti di consumo*).

There was also formed, with headquarters at Naples, an office for the promotion of co-operation in Southern Italy. This is intended to carry out a great propaganda in favour of the principles and practice of co-operation.

The National Credit Institution also facilitated the carrying out of the programme of the *Opera Nazionale per i Combattenti*.

§ 5. PROVISIONS IN FAVOUR OF THE CO-OPERATIVE DAIRY SOCIETIES.

The co-operative dairy societies, which represent one of the most interesting and most widely diffused forms of agricultural co-operation in Italy, suffered severely during the War in the invaded districts, where many of them disappeared.

From inquiries made it appears, in fact, that before the invasion there were 614 co-operative dairies in Venetia, of which 331 were in the province of Udine, 151 in the province of Belluno, 119 in the province of Vicenza and 13 in the province of Treviso. In the province of Udine only 22 dairies, all of them belonging to the mountainous districts, were working in 1919, and those only on a greatly reduced scale. In the province of Belluno very few were still working in that year. In the province of Vicenza 36 co-operative dairies were destroyed and of those which remained some were

not able to go on working. Of the co-operative dairies in the province of Treviso, not one was able to carry on its work.

But as the stock-breeding consortia, formed to facilitate the reconstitution of the herds of cattle in the liberated districts (Lieutenancy Decree of 8 May 1919, No. 862), were able to increase the number of head of cattle, it became more and more urgently necessary to provide also for the reorganization of the co-operative dairy societies.

The Ministry of the Liberated Districts accordingly decided to take suitable steps for this purpose in order to supplement the work that, in the exercise of its general functions and in virtue of the Law of 6 July 1912, No. 832, the Ministry of Agriculture was carrying on. In agreement, therefore, with the latter Ministry a Decree was issued on 26 January 1920 whereby in the financial year 1919-20 the sum of 200,000 liras (of which 150,000 liras were contributed by the Ministry of the Liberated Districts and 50,000 liras by the Ministry of Agriculture) were allocated for subsidies to the co-operative dairy societies of the liberated Venetian provinces to put them in a position to resume their normal working, independently of the payment of compensation for the damage which the dairies themselves had suffered. The subsidy, which could not exceed 3,000 liras, was granted for the purpose of adapting or restoring premises for use as cheese-factories or for providing apparatus and machinery for cheesemaking; it was given to societies which (a) were able to start working on economic lines and which could rely for the handling of the milk upon a sufficient nucleus of members with an adequate number of dairy cattle, or (b) were in such a position as to be able, with the help of the subsidy and with their own means, to reconstruct, adapt and repair their cheese-factories and supply them with the apparatus essential for the manufacture of dairy products.

To obtain the subsidy the co-operative dairy society had to present the following documents: (a) a copy of the rules of the society, showing that it was organized for the joint manipulation and sale of the produce, except such part of it as the members needed for their own families; (b) a list of the members showing the number of cows which each member possessed and of which the milk was handled in the co-operative cheese-factory; (c) an estimate of the first year's working, showing the quantity of milk which could be handled in the factory and of butter and cheese which could be produced; (d) a estimate of the work to be carried out and a list, with prices, of the apparatus and machinery to be acquired.

To decide upon the amount of the subsidies to be given in each case a special committee was formed consisting of three members, of whom two were nominated by the Ministry of the Liberated Districts and one by the Ministry of Agriculture.

Table III (page 172) shows the dairy societies which had received grants from the funds allocated for the purpose by the Decree mentioned up to the end of February 1921.

The sum allocated having been exhausted and many dairy societies not having been able to benefit by it, the Ministry for the Liberated Districts

TABLE III. — *Co-operative Dairy Societies Subsidized under the Decree of 26 January 1920.*

Province	Number of dairy societies existing before the invasion	Number of dairy societies resuming normal working	Number of dairy societies receiving grants	Amount of grant contributed by the Ministry of Liberated Districts	Amount of grant contributed by the Ministry of Agriculture
				lire	lire
Belluno . . .	151	100	118	37,000	44,450
Treviso . . .	13	6	4	3,700	500
Udine . . .	331	120	138	105,600	5,050
Venice . . .	—	—	—	—	—
Vicenza . . .	119	83	4	3,700	—
Total . . .	614	309	264	150,000	50,000

by a Decree dated 3 February 1921 allocated a further sum of 100,000 liras to be granted as subsidies in the financial year 1920-21 to the co-operative dairy societies formed prior to the war that had applied for help to resume their normal working. The same rules were followed in granting these subsidies as in granting the previous ones. The dairy societies subsidized are shown in the following table:

TABLE IV. — *Co-operative Dairy Societies Subsidized under the Decree of 3 February 1921.*

Province	Number of dairy societies receiving grants	Amount of grant
		lire
Belluno	84	35,100
Treviso	1	2,000
Udine	76	53,700
Venice	1	2,000
Vicenza	11	7,200
Total . . .	173	100,000

Thanks to the encouragement given by the Government and to the enterprise of the interested persons themselves, as well to the active aid rendered by the local live stock and cheese-making offices, the co-operative dairy societies are in a fair way to regain their former

prosperity. It may be added that in the process of reorganization they have introduced considerable improvements in the plant and in the management, which gives ground for the hope that in these districts the milk industry will soon not only have been revived but will have become more productive and more profitable than before.

§ 6. MEASURES IN FAVOUR OF MUTUAL INSURANCE SOCIETIES.

The working of mutual insurance societies in Italy was governed for a long time by the Law of 7 July 1907, No. 526. This contained provisions in favour of "small agricultural co-operative societies and small agricultural mutual insurance societies," and was the earliest legislation on the subject. It was proposed to simplify some legal formalities which experience had shown to be superfluous and troublesome for the smaller societies, to give them a more favourable fiscal treatment and to extend to the small mutual insurance societies the advantages conferred upon the small co-operative societies. The facilities granted consisted, in fact, in exemption from the twofold obligation, laid down by the Commercial Code, to publish notices relating to the formation of the society in newspapers specially named in the memorandum of association and in the *Bollettino Ufficiale delle Società per Azioni*, and in exemption for ten years from the stamp and registration taxes for societies which had assumed risks not exceeding 300,000 liras.

However this law did not fulfil all the purposes for which it was enacted, and, in view of the necessity, which has been strongly felt in recent years, of aiding both directly and indirectly the national economy, it was thought desirable to take further steps for promoting and encouraging the formation of mutual insurance societies which by guaranteeing the farmers against damage either to the property employed in production or to the resulting produce might act as a powerful aid to national production.

The measures taken in this matter, which are of capital importance for the development of agricultural insurance, are contained in the Decree-Law of 2 September 1919, No. 1,759, and in the Royal Decree of 26 February 1920, No. 271, which lays down the regulations for its application.

The agricultural mutual insurance societies, to benefit by the facilities afforded by the Decree mentioned and by the regulations for its application, must fulfil the following conditions:

(a) They must have as their object the giving of compensation for the damage resulting from agricultural risks. The risks which are considered to be agricultural risks are the risks of any kind whatever affecting the land, buildings, fixtures, moveable property and stock employed in carrying on agriculture (including gardening and market gardening) and forestry, and the industries auxiliary, complementary or accessory to agriculture or forestry, when they are pursued on account of and in the interest of a farm or a forestry undertaking and on the land

itself. Risks of any kind to the fruits or products of the industries named, in so far as they belong to the owner or manager of the farm or forestry undertaking are also considered agricultural risks.

(b) They must act within a strictly limited area of operations, an area, that is, limited to the commune or fraction of a commune in which the society has its headquarters, or even to several adjacent communes having a population of not more than 5,000 inhabitants. In the larger communes divided into sections (*mandamenti*) the area of operations of the society must be limited to a section. The limited area of operations renders it possible for the members to keep a watch on one another and avoids the necessity of creating a cumbrous and costly system of management.

(c) They must fix the total amount of the annual contribution. This must not exceed 30,000 liras for each branch of insurance nor 100,000 liras in the aggregate for all the branches of insurance carried on. The Ministry may in special cases authorize a society to exceed the limit of 30,000 liras for a particular branch of insurance, but the limit of 100,000 liras for all branches cannot be exceeded.

(d) They must have no paid officers, except the secretary and cashier.

(e) They must have no speculative objects in their work.

The mutual insurance societies must in their rules include amongst their objects everything which may be desirable to guard against or diminish the risks insured. In particular, those which carry on live stock insurance must lay down that their object is also the inspection and veterinary treatment of the animals and the sanitary improvement of stables and cowsheds and their surroundings.

The mutual insurance societies which fulfil the conditions indicated are incorporated by a Decree of the Prefect, issued after hearing the opinion of a Provincial Committee nominated by the competent Ministry; of this Committee the Director of Itinerant Agricultural Instruction is a member. To obtain such a decree, it is sufficient that the promoters of the mutual insurance societies should make application to the prefect, attaching a copy of the draft rules signed by all the initial members.

The advantage resulting from this simple and rapid procedure for the formation of the mutual insurance societies is obvious, since they are societies with a strictly local area of operations and are formed for the most part by small proprietors or small tenant farmers and in view of their unpretentious nature it is desirable that there should be as few formalities as possible to go through to obtain incorporation.

The documents relating to the formation of the societies and to the admission and withdrawal of members are not subject to registration or stamp duty. The same exemption applies to all documents relating to the transactions of the societies. All the sums which the societies allocate annually to their reserve funds are also exempt from the tax on personal property.

The provisions relating to the business organization of the mutual

insurance societies are particularly interesting. They must keep each branch of insurance distinct and the rules besides fixing a general entrance fee, must fix a special entrance fee for each branch in which the members intend to take out insurance. The rules must fix the amount of these entrance fees, and provide for the formation of reserve funds for each branch and the conditions upon which sums may be withdrawn from them to make good losses on the year's working. The general reserve fund is kept distinct from the special reserve funds. The general reserve fund serves to provide for depreciations and to make good losses on the general work of the society and on the carrying out of objects other than insurance contemplated by its rules. It is made up of the general entrance fees and of 10 per cent. of the special reserve funds. The special reserve funds are formed by the special entrance fees, by a percentage of the profits on each branch and by the interest accruing on the funds themselves. To the special reserves of the hail insurance branch and the live stock insurance branch at least 50 per cent. of the profits on those branches must be allocated each year. To other special reserve funds, at least 20 per cent. of the profits of the respective branches must be allocated. These percentages of the profits must continue to be allocated to the reserve funds until they have reached three times the contributions of the previous year in the case of the reserves of the hail and live stock branches and twice the contributions in the case of the other special reserves. At least half the reserve funds must be invested in State securities or securities guaranteed by the State and the remainder can be invested in the shares of local credit institutions, preferably institutions which supply credit for agricultural purposes.

The members must undertake to remain members for at least one year and insure all the property that they possess that is subject to the risk in question. The member who has insured his live stock must notify to the society every illness and every accident affecting an insured animal and from the moment of the notification the animal is considered to be the property of the society, which decides whether it is to be treated or slaughtered. The member whose crops have been insured against hail must immediately notify to the society any damage which may have occurred and suggest any measures which can be taken to prevent an aggravation of the damage. Lastly, the member insured against fire must immediately notify any fire which has occurred, its supposed cause and the amount and nature of the damage, and must show that he has used every means at his disposal to reduce the damage, direct or indirect.

The premiums are payable annually in advance and are proportionate to the values assured. In this connection it may be noted that ordinarily mutual insurance societies are not recognized which are based on a simple distribution of the losses, without payment in advance of fixed premiums proportionate to the values assured.

With regard to claims, the rules must fix the proportion in which compensation is to be paid; but it must not exceed 80 per cent. of the

losses in the case of fire or live stock insurance or 90 per cent. in other forms of insurance.

The mutual insurance societies provide for the reinsurance of their risks and for the protection of their interests by grouping themselves in provincial federations which, in their turn, reinsure with the National Insurance Institution or with private companies. Reinsurance is compulsory in the case of hail insurance and in this branch the societies must themselves carry not less than 10 per cent. nor more than 40 per cent. of the risks assumed.

In other branches reinsurance is optional but when it is effected, the society must itself carry at least 30 per cent. of the risks assumed in the case of live stock insurance and at least 50 per cent. of the risks in other branches. However, in the case of live stock insurance, the societies may reinsure 90 per cent. of the risks of mortality due to epidemics, themselves carrying the remaining 10 per cent. The National Insurance Institution has undertaken since 15 December 1921 the reinsurance of the agricultural mutual insurance societies complying with the regulations described, assuming for the live stock insurance societies even risks from epidemics. It must be noted that the Institution itself was authorized by the Lieutenantcy Decree of 14 April 1918, No. 565, to undertake during the War, on account of and in the interest of the State, reinsurance of any kind, including the reinsurance of risks assumed by mutual live stock insurance societies.

The Decree of 2 September 1919 regulates and encourages the formation of federations. It provides that the mutual insurance societies which, for reasons dependent on their own will, do not become affiliated to a federation shall not enjoy the privileges conferred by the law nor be able to reinsure the risks they have assumed with the National Insurance Institution.

To form a federation of mutual insurance societies or a reinsurance society at least ten mutual societies are required as initial members. Besides reinsurance, the federations have the following objects: (a) to inspect the affiliated mutual societies with a view to ensuring the observance of all the rules laid down in laws, regulations, rules and bye-laws which govern their working; (b) to see that their accounts are properly kept and that no irregularities occur in their management; (c) to consolidate the work of the societies by advice, instructions, and rules for their regular working and for supplementing their work, particularly in regard to the treatment of animals for the prevention of disease.

The federations are under the supervision of the Ministry and if they work in conformity with the Decree they enjoy the same privileges as the agricultural mutual insurance societies.

The last part of the regulations relates to the work of the Ministry and to the subsidies which it can grant. To facilitate the formation, equipment and working of agricultural mutual insurance societies an initial sum of 200,000 liras has been set aside. The Ministry may take action for the promotion of agricultural insurance in any of the following ways: (a) by directly promoting the formation of mutual insurance societies and

of federations or by giving assistance in technical matters or in questions concerning the management of societies to local efforts to form societies when, owing to the special circumstances of the local agricultural economy, insurance of this kind is considered necessary or desirable; (b) by providing the mutual insurance societies or federations with all that is required for their management or for keeping their accounts; (c) by promoting competitions. It can provide for the carrying out of this programme either directly or through the National Agricultural Mutual Insurance Institution — the propagandist body of this movement, to which are due most of the efforts which have been made in this field of action in Italy — or through the prefects, the mayors, or the itinerant agricultural instructors. In order to promote the formation of mutual insurance societies or of federations the Ministry may send its own representatives to study on the spot the conditions of insurance and of agricultural risks and to stimulate local efforts. It can also invite the interested parties or the promoters to attend conferences or meetings. The Ministry may also arrange for the compilation of special propagandist publications to illustrate the methods of management and technical organization of agricultural insurance societies according to the various local conditions and to the special nature of the risks to be insured. It may also grant gratuitously to the mutual insurance societies and to the federations, either at the beginning of their work or subsequently, the books, registers and printed forms necessary for carrying on their business. The Ministry must also assist in the solution of technical problems or problems connected with the management of the societies or federations and express its opinion, if requested to do so, on all questions which may arise between the societies and their members or between the federations and the societies in regard to the interpretation of the rules or the terms of insurance and the reinsurance contracts.

The federations may be given subsidies by the Ministry in any of the following circumstances: (a) when they have lost, for reasons not resulting from bad management, so large a part of the capital as to threaten the existence of the society; (b) when they have closed the accounts of the last year or years with a loss or have only been able to avoid loss by drawing upon the reserves to an unusually large extent; (c) when they have extended or propose to extend their work to other branches of insurance which are authorized by the Decree; (d) if they are just beginning business.

In no case, however, can a subsidy be given unless it is shown that the management expenses of the society or federation are kept within reasonable limits having regard to its size and the objects pursued.

The rules above described evidently aim at organizing the societies in question on a sound technical basis and with proper methods of working. They have produced beneficial results, having brought about a marked revival in this field, as is evidenced by the growing number of new societies (about 300 together with 10 provincial federations) and by the reorganization of the societies previously existing in conformity with the principles laid down in the Decree-Law. To a large extent, therefore, the general

and systematic development of agricultural mutual insurance which is now taking place in Italy is due to this Decree.

To complete our statement of the measures taken in Italy during the War period to safeguard the national agricultural wealth, we must also mention the Decree-Law of 15 April 1920, No. 577, which imposed a fixed tax of five liras on every head of cattle slaughtered, the sums collected being devoted to increasing and improving the live stock of the country. Of the nine tenths of the sums collected which is paid over to the State, one third is devoted to the promotion by suitable means of mutual insurance against mortality amongst live stock and against risks in slaughtering, particularly by the formation of private mutual insurance societies or the municipal insurance of butchers' beasts, as well as their grouping in federations for the purpose of paying compensation for the losses resulting from the total or partial sequestration of the meat for sanitary reasons.

§ 7. THE DEVELOPMENT OF CO-OPERATION FROM 1914 TO 1920.

The State-aid of various kinds which we have described and the new economic necessities resulting from the War, which we have also noted, explain the great development of the co-operative movement in Italy in recent years. A few figures may be given to illustrate this development.

According to the *Annuario Statistico Italiano*, the legally constituted co-operative societies, exclusive of those of which the principal business was to supply credit, numbered 7,429 on 30 June 1914. Amongst these the agricultural societies and vine-growers' societies numbered 1,242 in all.

It also appears from the *Annuario* that the legally constituted co-operative societies numbered 8,251 at the end of 1915, 8,421 at the end of 1916 and 8,764 at the end of 1917 and amongst these the agricultural societies and vine-growers' societies numbered respectively 1,371, 1,386 and 1,386.

Statistics have since been published by the Ministry of Labour and of Social Insurance (1) from which it appears that on 31 March 1921 the legally constituted co-operative societies numbered 19,570. In the few preceding months there had been a particularly rapid increase as on 15 July 1920 such societies only numbered 15,099. In a little less than eight months no fewer than 4,471 new societies had been formed, an increase of 29 per cent. The societies are distributed amongst the different classes as shown in Table V (page 179).

The most numerous class is that of the co-operative societies for production and labour, which numbered 7,643. The co-operative distributive societies had also greatly increased, the number having risen from 4,632 to 6,481. The third place is occupied by the agricultural co-operative societies, which numbered 2,239; the fourth place by the credit soc-

(1) See the *Bollettino del Lavoro e della Previdenza Sociale*, No. 5. Rome, May 1921. Ministry of Labour and Social Insurance.

TABLE V. — *Legally Constituted Co-operative Societies on 15 July 1920 and on 31 March 1921 divided according to Regions and to Classes of Society.*

Regions	Distribu- tive	Produc- tion and labour	Credit	Insurance	Miscell- aneous	Agricultu- ral (Law of 7 July 1907) (1)	General total
Piedmont	349	251	117	73	63	291	1,144
Liguria	162	319	13	3	55	18	600
Lombardy	1,178	782	205	21	160	179	2,525
Venetia	615	839	132	—	69	195	1,850
Emilia	429	1,271	170	5	97	581	2,653
Tuscany	609	433	101	4	61	89	1,297
The Marches	201	179	77	—	17	64	538
Umbria	127	73	24	—	8	25	257
Latium	187	604	135	7	88	96	1,117
Abruzzi	86	50	48	2	2	88	276
Campania	286	279	121	7	33	115	841
Apulia	99	297	46	2	12	45	501
Basilicata	18	32	17	—	1	6	74
Calabria	112	117	63	—	1	12	305
Sicily	148	321	230	4	22	211	936
Sardinia	26	45	17	2	1	94	185
Italy (15 July 1920) .	4,632	5,892	1,516	130	690	2,239	15,099
Co-operative societies constituted between 16 July 1920 and 31 March 1921 . . .	1,849	1,751	18	3	790	—	4,411
Total (31 March 1921)	6,481	7,643	1,534	133	1,480	2,239	19,510

(1) The Law of 7 July 1907, No 526, contains provisions in favour of all co-operative societies the business of which is connected with agriculture, to whatever branch of work they may devote themselves provided that the share capital does not exceed 10,000 liras.

eties, numbering 1,534, followed closely by the mixed and miscellaneous societies, numbering 1,480.

As regards their geographical distribution, the co-operative societies are most numerous in the regions of the North of Italy. Emilia stands first, followed by Lombardy, Venetia, Tuscany. These, in turn, are followed by Piedmont, Latium and Sicily. The last-named contains the largest number of co-operative credit societies; Emilia the largest number

of agricultural co-operative societies and co-operative labour societies, and Lombardy the largest number of co-operative distributive societies and miscellaneous societies.

The figures which we have just given are not complete, partly because they only relate to the legally constituted co-operative societies, partly because at the present time when the national economy is adjusting itself to the new conditions it is extremely difficult to compile accurate and complete statistics. They will serve, however, to give an idea of the importance attained in Italy by this form of economic organization and to show that the many measures which have been taken during the War period to encourage it have not remained without effect. G. C.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

ALGERIA.

1. CO-OPERATIVE AGRICULTURAL CREDIT IN 1921. — GOUVERNEMENT GÉNÉRAL DE L'ALGÉRIE: VUE ÉCONOMIQUE DE L'ALGÉRIE EN 1920 ET 1921. Algiers, 1921.

The question of co-operative agricultural credit has frequently engaged the attention of the Governor-general and his council, on occasions when they have been anxious to render assistance to the small farmers of the colony, who, in consequence of an exceptionally bad year, have been deprived of the necessary means for carrying on farming. More especially with a view to giving the farmers the opportunity of buying the seed wanted for the land under cultivation, the Government has decided to lend its financial support to the regional co-operative agricultural credit banks and an advance of 2,226,800 francs has been voted.

This loan, which is taken out of the payments due from the Bank of Algeria, has been apportioned among the different regional banks of the colony under the following conditions:

1. The advances are only to be employed for loans to farmers for the purchase of seed, and the banks must demand guarantees of repayment at the next harvest
2. The advances must be repaid to the colony at latest by 31 December 1921.
3. In accordance with Article 3 of the Law of 3 July 1901, the total of advances made to regional banks cannot exceed four times the total of the capital paid up in cash.

The Law of 5 April 1921 relating to appropriation of the supplementary payments of the Bank of Algeria as provided in the Law of 29 Dec-

ember 1918 will assure to short term agricultural credit very important resources amounting to a total of 15,982,000 francs, which will allow of supplying needs that are rapidly on the increase.

The same Law further assigns special resources to collective credit, to co-operative societies and to individual long term credit.

On the other hand the central administration has approached the Bank of Algeria and the principal financial houses of the colony with a view to inducing them to discount agricultural bills more freely, and in particular bills of the regional co-operative agricultural credit banks. As a result of these negotiations, facilities have been granted, such as the opening of a credit of 4 million francs with a view to the harvesting, in favour of two regional banks of Algeria which have given mutual guarantees. Other facilities have been promised in a proportion compatible with the difficulties of the present situation.

M. B.

* * *

2. CO-OPERATIVE CREDIT FOR THE PURCHASE OF SEEDS IN THE DEPARTMENT OF CONSTANTINE. — *La Voix des Colons*, Algiers, 1 January 1922.

In consequence of the disastrous harvest of 1920, a number of farmers in the department of Constantine, which depends almost entirely on the cereal crop, were confronted with the alarming prospect of being unable to sow, having neither seeds nor credit. The situation was saved by the prompt action of a group of farmers who from the management of co-operative institutions were thoroughly conversant with the practical application of co-operative principles.

Two problems presented themselves and had to be solved: to find money, and to apportion it.

To find money was no easy matter. There was a general crisis in credit business: bills usually unquestioned were refused or only limited discount was given; to ask banks for advances for the needy cultivators at such a moment might well seem an absurdity. It was, however, to the banks that application was made, and with complete success because it was possible to offer substantial guarantees.

All banks with offices at Constantine, namely, *Crédit Lyonnais*, *Crédit Foncier*, *Société Générale*, *Compagnie Algérienne*, were approached and their concurrence obtained. The request made to them was that they should open a credit at the Regional Bank of Constantine for 3,500,000 francs, guaranteed by that bank and by individual promissory notes for an equivalent sum, these to be given under the signature of the farmers of most standing in the department. The whole operation centred round the signing of these promissory notes. An appeal to the sense of joint responsibility felt by all farmers was issued by the Constantine General Federation of Agriculturists. This appeal met with a response, and in a few days 137 prominent farmers of the district signed 378 promissory notes of 10,000 francs with date of expiry 30 September 1921, representing a total guar-

antee of 3,780,000 francs. These notes were handed to the Regional Bank at Constantine, which thus had at its disposal a guarantee fund more than sufficient to guarantee its bank loans within the limits of anticipated requirements.

The money was found. To apportion it fairly was the remaining task, while guarding the Regional Bank and the sureties against risk of loss. These objects were very readily attained by bringing into the field the guarantee of the communes, to whom the apportionment was entrusted while making them liable. It was understood that in order to guarantee themselves the commune would demand from each borrower a solvent surety. On the other hand, the General Council voted a sum of 900,000 francs with a view to covering any possible losses. Finally, the Colony in its turn stepped in to take on itself the general expenses of the undertaking and a third of what loss there might be.

The loans granted amounted to a total of 3,246,814.80 francs enabling the farmers to obtain delivery of 32,000 tons of seed wheat and seed barley.

This successful result was directly due to the action of the sureties in giving their signatures and their credit. Their satisfaction cannot be tinged with any regret, as the whole business has been put through as far as they are concerned without their incurring the smallest loss. In fact on the falling due of the promissory notes on 30 September 1921, the communes liable for the loans were called on by the Prefect of the department to reimburse the total amount. They complied, and the Regional Bank after reimbursing in its turn the banks which had opened credits in its favour, released the sureties from their guarantees, and they regained possession of the whole sum they had engaged to pay. The communes, on their side, have been reimbursed by the borrowers in respect of the larger part of the sums lent. Postponement of payments has been allowed in cases where there are justifiable reasons for the delay. If some loans are entered, when the accounts are finally made up, as irrecoverable, the loss will be shared between the communes, the department and the Colony.

M. B.

BULGARIA.

RECENT STATISTICS OF AGRICULTURAL CO-OPERATION. — *L'Echo de Bulgaria*. Sofia, 2 December 1921.

A recent law having conferred on the Agricultural Bank of Bulgaria the right of directing, granting credit to and supervising the various co-operative agricultural societies of the country, the Central Co-operative Bank has submitted to that establishment the accounts of all the co-operative societies in which three quarters of the members are engaged in agriculture or in one of its branches. Following on this, the Agricultural Bank of Bulgaria has had statistics drawn up of the co-operative societies in operation on 30 June 1921, with the following results:

On 30 June 1921, there were in the territory of Bulgaria, as delimited

by the recent treaty, about 1,862 co-operative associations established in 1,471 different localities. According to the last census there are 4,634 villages and towns in Bulgaria, so that it follows that 34 per cent of these centres of population possess co-operative societies. The population of the kingdom being 4,860,311 persons, there is one co-operative association for 2,604 persons. More exactly, one co-operative credit society may be reckoned to every 4,520 persons, one co-operative distributive society to every 9,500 persons, and one co-operative productive society to every 23,000 persons.

The 1,862 co-operative societies may be classified according to their aim as follows:

Credit Societies and Popular Banks	1,077
Co-operative Productive Societies	212
Co-operative Distributive Societies	512
Syndicates	61
Total	1,862

As we see, the co-operative credit societies stand first by a considerable majority. We may note, however, that in view of the general shortage, these societies were obliged in nearly every case to undertake the supply of articles of prime necessity: salt, petrol, sugar, soap, cereals, agricultural implements, etc. They have rendered very important services in the struggle against the village usurers, whom they have practically rendered harmless.

The following table shows the disastrous influence which first the Balkan war and then the European war had on Bulgarian co-operation.

Progress of Bulgarian Co-operation from 1906 to 1921.

Class	Societies formed before 1906	Societies formed 1906 to 1912	Societies formed 1913 to 1918	Societies formed between January 1919 and 30 June 1921	Total
Credit societies and popular banks	117	563	130	267	1,077
Productive societies	3	35	25	149	212
Distributive societies	5	28	36	443	512
Syndicates	—	4	1	56	61
Total	125	630	192	915	1,862

It follows from this table that from 1913 to the end of 1918, only 192 co-operative societies were formed, the majority of which were constituted in the second half of 1918, that is to say after the crisis of production and supply had begun to make itself felt. On the other hand, the number

of the co-operative associations increased rapidly between 1 January 1919, and 30 June 1921; there were in fact 915 formed during that period, or an average of 370 a year, as against an average of 59 a year from 1913 to 1918.

In about 1,304 of the co-operative societies, three quarters of the members carry on agriculture as their principal occupation. The members of the other 588 societies belong to other occupations. On 30 June 1921, 814 societies had contracted loans with the Central Co-operative Bank, which had opened credits in their favour amounting to 83,336,400 leva. Out of these credits, 54,954,413 leva had been utilized. The fact that a considerable balance remains unutilized is to be attributed firstly to the fact that many societies have capital of their own and keep the credits opened in their favour by the Bank as a reserve, and secondly to the fact that in certain societies, the managing staff is not sufficiently experienced to undertake more important operations and contents itself with small operations which do not require large capital.

The Bank has rendered special assistance to the co-operative societies of tobacco planters, by advancing them funds to enable them to improve tobacco cultivation and to render it more intensive, as well as to enable them to develop an export business. On 30 June 1921, these societies had borrowed 11 million leva.

M. B.

CZECHOSLOVAKIA.

I. A BILL, RELATING TO CO-OPERATIVE AGRICULTURAL SOCIETIES AND CHAMBERS OF AGRICULTURE. — *Landwirtschaftliche Genossenschafts Zeitung für Österreich und die Nachbarstaaten*, No. 13, Graz, 1 November 1921.

.. The essential points of this Bill are as follows. An agricultural co-operative society must, as a rule, be coterminous with the administrative area of a political authority of the first degree, that is to say with the territory of a district captaincy. By the provisions of the bill (and therefore compulsorily) the following are members of the co-operative society: (1) owners and tenants: all the owners, persons enjoying the usufruct or tenants of holdings under cultivation and subject to payment of the land-tax, and one hectare or less in extent; (2) agricultural labourers: all wage-earners who do not come under insurance for old age pensions, and the permanent labourers of both sexes, who have reached the age of twenty-one and at the time of the forwarding of the list of members, have been employed on the same farm for a period of not less than six months; (3) those in any way directing agriculture: members of the teaching staff of the agricultural colleges, those employed on agricultural undertakings, veterinary surgeons, etc., provided they are fully twenty-one years of age.

Two Chambers of Agriculture are to be founded in the first instance, one at Prague for Bohemia, and one at Brunn for Moravia and for Silesia. The co-operative societies send their representatives to the general meeting and to the executive committee of the Chambers of Agriculture and these, in turn, send representatives to the general meeting and the executive

committee of the co-operative societies. The Minister of Agriculture is represented in the Chambers of Agriculture by his delegates. He is authorized to dissolve the presidency or the executive committee of a Chamber of Agriculture for any reasons of a serious nature and by consent of the Regional Administrative Council.

The financial means necessary for the establishment of the co-operative agricultural societies and the Chambers of Agriculture, as well as for furnishing them with credit, must be built up by the receipts of the institutions themselves, by State and provincial contributions, and by the compulsory contributions of members of the co-operative societies.

M. T.

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2. THE SITUATION OF THE CENTRAL FEDERATION OF THE GERMAN CO-OPERATIVE AGRICULTURAL SOCIETIES OF BOHEMIA ON 31 DECEMBER 1921. — *Deutsches Landwirtschaftliches Genossenschaftsblatt*, No. 2. Prague, 20 January 1922.

On 31 December 1921, the Central Federation of the German Agricultural Co-operative Societies of Bohemia included 790 co-operative credit societies, 47 co-operative societies for warehousing, purchase, sale and farming, 24 co-operative dairies, 21 co-operative societies for the purchase of machinery and the distribution of electric power, 19 co-operative pasturage societies, 16 co-operative societies for the employment of agricultural machines, 14 societies for the working of mills, 7 flax-cultivation societies, 7 stock-breeding societies, and 24 miscellaneous co-operative societies. There were, too, affiliated to the Central Federation, as members, the German Central Agricultural and Forestry Federation of Bohemia, and the Federation of the German Dairies of Bohemia, Prague.

M. T.

DENMARK.

1. THE DANISH CO-OPERATIVE EGG EXPORT SOCIETY SINCE THE WAR (DANSK ANDELS ÆGGEKSPORT). — KOCK (W. A.): *Dansk Andels Æggekports Virksomhed i 25 aar* (Working of the Danish Co-operative Egg Export Society, during 25 years). Copenhagen, 1920. — *Andelsbladet* (Journal of the Co-operation), Nos. 25 and 47. Aarhus, 24 June and 25 November 1921. — *STATISTISK AARBØG, 1921* (Statistical Year-Book, 1921), Copenhagen, 1921. — KNUDSEN (H. M.): *Landøkonomisk Aarbog for 1921* (Year-Book of Agricultural Economy, 1921). — HOWE (F. C.): *Denmark, a Co-operative Commonwealth*. New York, 1921.

During the last five years, the organization of the great Danish Co-operative Egg Export Society has not undergone any changes. It has remained exactly as described in our issue of December 1916. We confine ourselves therefore to giving in this number some figures relating to it, which have been obtained from the publications enumerated above.

The figure of primary importance is that of the number of poultry. Here there has been a marked diminution since during the war. While

up to 1914 the number increased steadily, in 1918 it was reduced to two thirds the pre-war figure. After the armistice there was a resumption of poultry-breeding and the production soon came to exceed by a considerable amount that of 1914, as appears from the following table:

1909	11,815,783
1914	15,140,072
1917	12,287,795
1918	9,783,692
1919	12,134,521
1920 (15 July)	14,395,000
1921 (15 July)	about 17,100,000

To the figures of 1920 and 1921 must be added the number of poultry in Schleswig, now a part of Denmark. This number amounts to nearly 600,000.

The statistics for the exports of eggs show a similar curve:

	Imports	Exports	Excess of exports over imports
	in thousand of cases (20 eggs)		
1909	2,800	20,233	17,433
1914	1,880	23,431	21,551
1917	—	22,190	22,190
1918	—	16,388	16,388
1919	1	16,923	16,192
1920	57	21,314	27,257
1921	—	about 16,400	—

These figures however do not give an exact total as regards the export of eggs, as the share of the *Dansk Andels Aegexport* is not quite easy to state with precision, from the fact that it is the practice of this society to sell its eggs by weight and in consequence to supply the figures in kilogrammes. The average weight of an egg can however be reckoned as 50 grammes, and thus an idea can be formed of the relative importance of the business.

The statistics furnished by the Society to the years already shown are as follows:

	Eggs (1) kg.	Value (2) crowns	Average price per half-kg. öre
1909	4,318,885	4,569,980	52.91
1914	4,694,450	5,692,096	60.45
1917	4,325,721	9,358,002	108.15
1918	2,774,069	9,581,021	172.70
1919	3,028,906	13,639,679	224.65
1920	4,122,466	20,700,596	236.50

(1) Quantities of eggs coming into the warehouses during the year, plus the quantity actually in store on the first day of the year.

(2) Price received for eggs sold and estimated value of those remaining in store at the end of the year.

In 1920, the number of members of the Society was some 50,000 grouped in 340 circles called *Kredse*. The steady increase of these two figures is itself an indication that the egg-producers find it an advantage to belong to the *Dansk Andels Aegexport*. What this advantage amounts to becomes clear from a comparison between the prices offered by the independent exporters and the prices paid by the Society, plus the bonuses that are distributed to the members at the end of the working year. The producers who are members of the *Dansk Andels Aegexport* make about .3 of a crown more per kilogramme of eggs.

To give an idea of the present financial situation of this society, as compared with the situation in 1914, we are displaying the figures of the two years in one table (page 187). In judging of the sums employed, the general fall in the purchasing of money must be taken into account. In the Statistical Year-book of Denmark the price of exported eggs is shown as 7.95 crowns per hundred in 1914 and as 33.50 crowns in 1920.

H. M. R. L.

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2. DANISH CO-OPERATION IN 1920-21. — *Andelsbladet (Journal of Co-operation)*. Aarhus, 6 January 1922.

The considerable share of co-operation in the business of the country continues to increase. An estimate of it may be formed from some figures which follow, relating to the financial year 1920-21 except in the case of certain societies which make 1 January the starting point of their year when the figures of 1920 have been utilized.

At the head of the list come the co-operative dairies with a turn-over of 750,000,000 crowns, of which approximately 195,000,000 crowns represent sales to butter-exporting societies. Next come the co-operative bacon-factories with a turn-over of 268,300,000 crowns, to which must be added 14,600,000 crowns representing an egg export trade which comes under their direction. Lastly we have the distributive co-operative societies, widely spread in the country districts (212,000,000 crowns).

Co-operative purchases amount to 163,600,000 crowns, of which 160,500,000 have to do wholly with agriculture (cattle food, 116,900,000 crowns; chemical fertilizers, 30,100,000 crowns; dairy requisites, etc. 7,400,000 crowns; seeds, 6,100,000 crowns). We have still to note the cattle exporting societies (33,200,000 crowns) and the Danish Co-operative Egg Export Society (20,700,000 crowns).

In all, the turn-over of the Danish co-operative societies amounted to 1,470,300,000 crowns in 1920-21. In 1919-20 it was only 1,165,300,000 crowns, in 1918-19, 758,900,000 crowns, and in 1913-14, 611,500,000 crowns.

H. M. R. L.

FRANCE.

1. THE GUIDING PRINCIPLES ESSENTIAL TO THE FORMATION OF CO-OPERATIVE AGRICULTURAL CREDIT BANKS. — *La France Paysanne*. Paris, 13 November 1921.

M. Maurice Dufourmantelle, president of the *Centre fédératif du crédit populaire en France* has recently made the attempt, in *La France Paysanne*, to define the three principles which should guide the action of the promoters of co-operative agricultural credit banks.

The first principle relates to the recruiting of the original members. It is often supposed that an agricultural credit bank, in order to make its way, must from the first attract a fairly large number of members and build up a considerable share-capital. This is a misconception. According to M. Dufourmantelle, it is essential to invite to take part in the formation of the society only persons of unimpeachable character, possessing sufficient resources, and commanding general esteem. The first management committee of the association will naturally be drawn from among these original members, and it is obvious that the degree of confidence the society will inspire will depend in large measure on the character and reputation of the men who direct it. Then, too, the recruiting of the right people in a commune or group of communes can only be effected by individual propaganda work, whereby the promoters use discernment in putting the idea before each person in turn. By thus influencing and spreading conviction among fifteen or twenty of the best of their fellow-citizens, they will have done a far more lasting piece of work than if they had appealed for subscriptions at a public meeting. Later when the association has been formed, there will be scope for a public meeting to explain its objects and to spread interest. No risk will then be incurred, as nominations of new members will be submitted for the approval of the management committee. But in M. Dufourmantelle's opinion it is essential at first to exercise care in this respect.

Admission to the society must not be open to the first comer. Co-operative credit depending as it does primarily on the moral qualities of individuals, there can be no admission of unworthy persons into an association where the sum-total of the virtues counts for more than the sum-total of the capital. Such a selection however is only possible if the recruiting of the original members is carried on quietly and without advertizing it in any way, among those who know each other well. It is from among this select circle, small at first but widening as time goes on, that the credit bank is properly founded.

From this first guiding principle, there naturally springs a second, that relating to the area served by the credit bank. This should not have too extended a radius: otherwise there is less chance of obtaining a satisfactory knowledge whether of the candidates for membership, or of the possible borrowers, and serious difficulties are met with in estimating the credit-worthiness in either case. M. Dufourmantelle thinks that the communal bank best meets the case in a country like France. If the commune is

not important enough to ensure sufficient business to the bank, then, he would say, extend the area to the adjoining communes, but stop there.

The third and last principle relates to the question of liability. Is the bank to be constituted on the basis of limited liability, that is to say, in the event of its liquidation, should the liability of the members be limited to the total of their subscribed shares, their loss not exceeding such subscription? Or, on the other hand, is the basis of unlimited liability to be adopted, a basis by the terms of which the members are liable to the full extent of their property for the society's debts and not only in proportion to the subscribed capital? Shall we stop, as a solution, at an intermediate type, according to which each member is bound by the society's engagements not only up to the amount of the shares subscribed by him, but further, in case of need, for a certain multiple, provided for in the rules, of the total of his subscription? According as one or other of these schemes is adopted, a larger or smaller guarantee will be offered by the society to non-members who are thinking of depositing money with it or of making loans to it, and consequently the society will have a more or less considerable capacity for obtaining credit.

Clearly, the principle of limited liability is the one most satisfactory to the members. They know exactly how much they are risking. But it is also the arrangement which offers least attraction to outside capital, while at the same time limiting the resources of the bank. With the intermediate form, these resources are expanded, but still limited. With unlimited liability, they become considerable and put the society in a position to render numerous services. Thus it is this type that M. Dufourmantelle advises should be adopted.

At first sight there seem to be certain alarming consequences entailed by this system. To be liable for the society's debts in respect of all one's goods in the event of a business failure seems excessive. However, in spite of the word, nothing is really more limited than the liability incurred in the long run under this system by members. As a matter of fact, in societies of this type, the annual general meeting is bound to fix the total of the engagements the society may make, whether in the form of loans, or in that of accepting deposits. It is thus strictly the members themselves who fix the maximum of the liability they propose to incur, and one may feel sure that they will take the whole position of the society into account, that they will follow its working closely, that they will have the strengthening of the reserve funds much at heart, that they will expect the administrative body to exercise a thorough supervision of all operations, and will require from borrowers adequate personal guarantees (such as joint and several promissory notes) as well as sound chattel or real security (such as warrants).

Thus the risks of each individual are reduced by these various precautions, without lowering the borrowing capacity of the society.

Let us at this point compare the borrowing capacity of a bank with limited liability and that of a bank with unlimited liability, assuming that each has a foundation capital of 10,000 francs. The former will

find difficulty in obtaining a loan for a larger sum than its share capital, because that capital, and what additional reserve there may be, will represent the maximum guarantee that can be offered to non-members: from the same cause the business which it can do is limited. The second type will find itself on the contrary able to borrow all it needs, and in a position moreover to render all kinds of services, because in addition to its modest capital it can offer to its creditors the guarantee of many hundred thousand francs representing the aggregate amount of the possessions of the members, while at the same time this guarantee does not go beyond the limits fixed each year by the members themselves. M. B.

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1. TWELVE YEARS OF CO-OPERATIVE MILLING. — PEYSSONNERIE (L.): Les magasins à blé Coopératifs in grain warehouses, in the *Annales de la mutualité et de la coopération agricoles*. Paris, November-December 1921.

As the co-operative grain warehouse was originally only the first stage towards the co-operative mill, the example of the Condom (Gers) co-operative milling society possesses an interest in that it shows what can be achieved in that direction.

The promoters of the society, founded in 1908, made it a principle that in their co-operative organization, the grain warehouse was to act as it were as the threshold of the mill, and to the mill they attached a co-operative bakery, thus establishing a complete system of disposing of the wheat yield by co-operative methods.

There is considerable variety in the terms offered for wheat deliveries at the Condom warehouses, and the society thus gains an elasticity of method which allows of meeting the requirements of 1,355 members.

Delivery without cash advanced. — The co-operators put their wheat at the disposal of the society from the date of harvest and do not ask for any advance payment. At the end of the society's working year they have the right to:

- (a) the value of the wheat delivered at the average price of the year.
- (b) a bonus reckoned for each member in proportion to the total quantity of wheat delivered.
- (c) interest at 4 per cent. of the value of the wheat received by the society, reckoned also on the basis of the average price of the year.

Delivery with part cash advanced. — The co-operators place their wheat at the disposal of the society from the date of harvest, and can have part payment in a week. The remainder is paid to them in accordance with the average price of the year and at the same time as the bonus out of the society's profits.

If the wheat is delivered later, then the members concerned have only a claim for a bonus proportional to the time still to elapse before the close of the season, and they cannot make any claim for the 4 per cent. interest which is available only on deliveries without cash payment.

Delivery with full cash payment. — The wheat is bought at market price and paid for on the spot. In this case the co-operator has no claim to any bonus, seeing that he has fixed the conditions of sale himself.

Wheat exchanged for value in bread. — In the last instance it is open to members to send wheat to the society for conversion into bread for household consumption. No bonus is payable on this transaction. Seventy kilogrammes of bread is delivered against a hectolitre of wheat.

It may be added that the co-operative society undertakes to buy from its members, with a view to selling again what surplus there may be, the whole yield of the harvest. This gives members the opportunity of selling off all their produce on the most favourable terms.

In 1920, 18,890 quintals of wheat came into the Condom warehouse, and 1,621,000 kilogrammes of bread were made in the bakery.

The financial results of the undertaking are excellent. All middlemen's profits are done away with, and the charge for grinding, made in accordance with trade usage, is reduced to a minimum (13 to 15 francs per kilogramme), so that the following profits have been shared each year among the members, in proportion to the transactions each has had with the society.

Years	Number of co-operators	Excess of receipts over expenditure
		francs
1909.	302	1,600
1910.	532	13,700
1911.	692	15,000
1912.	727	33,400
1913.	896	43,400
1914.	924	31,600
1915.	994	15,000
1916.	1,079	44,700
1917.	1,117	44,700
1918.	1,197	137,500
1919.	1,207	121,000
1920.	1,355	123,300

These figures afford proof of the prosperity of the society seeing that the share capital does not exceed 50,000 francs. M. B.

GREAT BRITAIN AND IRELAND.

A COOPERATIVE DAIRY FARMING SOCIETY. — *Journal of the Ministry of Agriculture.* London, December 1921.

The North Seaton Co-operative Farming Society, managed by a community of miners, was founded in 1872, the colliery village having no milk supply. At the start the members numbered forty or fifty miners, each of whom paid £1. They started with three cows, increasing the number as the demand for milk increased. After a time the Colliery Company

built a brick cow byre to stall 14 cows and let to the Society two fields amounting to 24 acres, half being grazed and the other half mown for hay. A larger byre was built about 15 years ago to accomodate 22 cows, and the stock now usually includes 20 cows, one bull and a pony. Milk is supplied to anyone in the village, members and non-members.

In 1914, the Society sold milk at 3d. a quart; in 1920 the price was 6d.; but while in 1914 the average cost of keeping each cow was £22 14s. in 1920 it was £70. In 1920 each cow produced over 800 gallons of milk. By showing in the balance sheet a nominal valuation of each cow (in 1920 it was £27) the Society protects itself against any sudden and heavy fall in prices which may occur. There are now 165 shareholders in the Society. Five per cent. is paid on the share capital, and the balance, after providing for a reserve fund, is distributed amongst the members as a bonus on their milk purchases. As much as 4s. in the £ has been paid in this way.

W. E. H. L.

HOLLAND.

1. CO-OPERATIVE DAIRIES IN 1920 (1). — *Verslappen en Mededeelingen van de Directie van den Landbouw* 1920, No. 3, 1921, No. 3. — *Algemeene Nederlandsche Zuuvelbond, Verslag over het jaar 1920.*

The number of co-operative dairies and cheese-factories has varied in recent years as follows:

TABLE I. — *Statistics of Dairies and Cheese Factories.*

	1895	1910	1919	1920
Co-operative Dairies:				
• Worked by steam	80	379	529	531
• • hand	136	301	55	22
Total	216	680	584	553
Co-operative cheese factories	—	201	230	236
Proprietary dairies:				
Worked by steam	148	241	216	266
• • hand	119	37	57	14
Total	267	278	273	280
Proprietary cheese factories	—	90	105	101

This table shows that between 1910 and 1920, the number of co-operative dairies was considerably reduced, falling from 680 to 552, while in the same period the number of proprietary dairies was maintained, passing from 278 to 280. The facts, however really point rather to a process of development, the small dairies disappearing and being replaced by dairies worked by steam. It is, in short, the dairies worked by hand that are

(1) *International Review of Agricultural Economics*, January 1918, page 1, and January-February 1919, page 35.

fewer, falling from 301 to 22, while the dairies worked by steam rose from 379 to 531.

This generalization is fully confirmed by the development of the Dutch General Association of Co-operative Dairies, which comprises most of the co-operative dairies of the Netherlands. The development of the association is shown in the following table.

TABLE II. — *Development of the Dutch General Association of Co-operative Dairies to 1920.*

Years	Number of affiliated dairies	Quantity of milk handled
		millions of kilogrammes
1913	383	959
1914	454	1,129
1915	465	1,209
1916	495	1,414
1917	518	1,373
1918	538	1,164
1919	502	1,144
1920	485	1,252

It will be observed that from 1918 to 1920, the quantity of milk handled increased by 88,000,000 kilogrammes, although the number of affiliated dairies fell from 538 to 485. The quantity of milk handled is besides in 1920 much above the pre-war figures, while all over the country the butter produced under the supervision of the "Butter Control Stations" has notably decreased. This production in thousands of kilogrammes was 45,763 in 1912, 50,267 in 1913, 54,985 in 1914, 57,815 in 1915, 60,809 in 1916, 54,094 in 1917, 39,657 in 1918, and 42,990 in 1919.

These few figures, scanty as they are, are proof of the encouraging results obtained by co-operation.

H. M. R. L.

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2. THE RAFFEISEN BANKS IN 1919. — FAARCIJFERS VOOR HET KONINKRIJK DER NEDERLANDER (*Statistical Year Book of the Kingdom of Holland*) 1919. The Hague, 1921.

The increase in the transactions of the Raffeyen banks noted in our issue of April 1921 has been even more pronounced in 1919. The figures in brackets are those of 1918.

In 1919, there were 1,159 (1,115) Raffeyen banks in Holland. Out of these, 1,154 (1,105) have supplied information. These banks have received during the year 159,312 (162,335) deposits, amounting to 156,693,000 (135,728,000) florins, and have effected 92,649 (84,626) repayments, which including interest, amounted to 132,624,000 (92,819,000) florins, so that at the end of the year the total of deposits amounted to 227,765,000 (196,842,000) florins, divided among 222,520 (216,559) depositors. The

number of loans outstanding at the end of the year was 52,323 (46,330) amounting to 78,662,000 (53,000,000) florins; out of these, 11,006 (9,791) loans had been made in the course of the year, amounting to a total of 49,760,000 (28,268,000) florins. The total assets of the banks amounted to 249,307,000 (213,946,000) florins, and the profits of the year were 539,000 (435,000) florins.

H. M. R. L.

NORWAY.

ASSOCIATIONS OF FOREST OWNERS. — ALME (Hølge): Kort oversikt over skogeiers-
sammenslutninger (*A Brief Account of the Associations of Forest-owners*). Christiania, 1921.

Thirty years ago, the production of and trade in timber were not yet organized in Norway. It was only when the paper industry began to demand larger and larger quantities of cellulose that the owners succeeded in forcing the shippers to take small timber as well as the large tree-trunks for sea-transport. This small timber was then reckoned by the volume of wood. This system which has been in force since 1917 renders proper thinning of the forests possible, and even the sale of trees of undeveloped growth.

In 1911, further progress was made by the foundation of the *Skogbrand*, a society for co-operative insurance against forest fires.

A short time after the foundation of the *Skogbrand*, the owners, actuated by a desire to safeguard their interests, formed a league which took the name of the *Norsk Skogeierforbund*. This league includes local associations, of which the most important is that of the basin of Glommen.

The *Norsk Skogeierforbund* makes it its especial business to standardize processes employed in measuring timber, and prices, in the different provinces.

To facilitate credit in 1917 a considerable number of forest owners, founded a bank at Christiania and paid up a capital of two million crowns, which in 1918 they raised to five million crowns.

In addition, forest owners interested themselves in improvements in sylviculture, founding a forestry society called *Det norske Skogselskap*, and a credit society for agriculture and sylviculture under the name of *Norges Kredit forening for Land-og Skogbruk*. In the granting of loans, this latter gives preference to forest owners who are insured in the *Skogbrand*, as the policy of that society constitutes for the credit society a security of high value.

H. M. R. L.

POLAND.

THE FEDERATION OF POLISH CO-OPERATIVE SOCIETIES IN THE PROVINCES OF POSNANIA AND WEST PRUSSIA IN 1920. — REPORT OF THE FEDERATION FOR THE YEARS 1918-1919. Poznań, 1921.

This Federation, of which we gave an account (1) in 1917 attained its fiftieth year in 1921. At the close of the preceding financial year, the affiliated societies in its original area of operations, now incorporated in

(1) See our issue of June 1917, page 24.

Poland, comprised 201 credit societies, with 118,998 members : 64 co-operative societies for the sale of produce and purchase of requisites with 8,483 members ; eight societies for the acquisition and sub-division of land, with 1,719 members ; ten miscellaneous societies with 5,427 members ; making a total of 283 societies with 134,627 members.

To these figures must be added, for the new territories to which the working of the Federation is now extended ; 27 credit societies with 16,627 members ; one society for the sale of produce and purchase of requisites with 111 members, one society for the acquisition and sub-division of land with 117 members ; making a total of 29 associations with 19,855 members.

Among the 118,998 members of the credit societies of the original area of operations, 75,191 agriculturists are included, of whom 65,438 are small proprietors : among the 16,627 members of the credit societies of the new area, 7,519 agriculturists are included of whom 7,244 are small proprietors.

The greater part of the working capital of the credit societies is built up of deposits. In 1920 there were no less than 403,506 depositors, 355,188 of whom belonged to the original area. The average sum deposited was 3,089 marks : it was appreciably less in the new area.

This high figure results in the preponderance of borrowed capital over owned capital in the credit societies. The 201 credit societies belonging to the original area of operations had at their disposal 148,604,503 marks of owned capital as against 2,207,891,041 marks of borrowed capital : that is for every 100 marks of owned capital they had 1,486 marks of borrowed capital. In the two groups of credit societies in the new area, borrowed capital plays an even larger part ; in the first, there were 937,866 marks of owned capital and 16,111,500 marks of borrowed capital, that is for every 100 marks of owned capital, there were 1,717 marks of borrowed capital. In the second group, there were 4,257,499 marks of owned capital, and 98,629,741 marks of borrowed capital, that is 2,317 marks of borrowed capital for every 100 marks of owned capital.

As regards the societies for sale and purchase in the original area, their growing importance is proved by the table given on page 197.

These figures must obviously be interpreted with some care, in view of the fluctuations in the value of the mark during the last financial years ; if however attention is directed to the volume of transactions effected during the same period, a remarkable progress is noticeable, especially in the last two financial years. The number of quintals of goods sold rises as a matter of fact from 6,448,529 in 1911-12, to 7,950,535 in 1912-13, to 8,546,438 in 1913-14, to 5,883,566 in 1914-15, to 7,295,633 in 1915-16, to 7,731,681 in 1916-17, to 7,690,806 in 1917-18. It reaches 9,181,561 quintals in 1918-19 and 10,681,170 in 1919-20.

M. T.

Progress of the Co-operative Societies for Purchase and Sale.

Year	Number of societies	Working capital marks	Produce warehoused marks	Sale of produce marks	Profits		Expenses	
					total marks	%	total marks	%
1 July 1910 - 30 June 1911	54	9,783,385	577,125	29,778,374	889,431	2.99	765,514	2.57
" 1911 - " 1912	56	11,785,149	781,106	42,874,092	1,321,382	3.08	923,750	2.15
" 1912 - " 1913	57	12,557,538	697,781	45,844,454	1,041,678	2.27	1,032,035	2.25
" 1913 - " 1914	60	14,177,706	600,414	44,947,144	1,320,113	2.94	1,136,997	2.53
" 1914 - " 1915	61	12,070,309	465,974	40,979,776	2,420,351	5.91	1,265,062	3.09
" 1915 - " 1916	63	12,756,851	366,676	56,681,667	2,638,535	4.74	1,402,392	2.52
" 1916 - " 1917	63	12,700,160	451,314	60,795,314	2,530,507	4.18	1,714,476	2.82
" 1917 - " 1918	63	14,156,658	579,644	63,014,630	2,711,453	4.60	1,989,291	3.16
" 1918 - " 1919	62	24,392,109	740,054	95,744,123	4,443,570	4.34	2,850,818	2.98
" 1919 - " 1920	64	74,745,473	5,451,609	309,545,111	21,159,698	6.84	9,477,678	3.06

PROTECTORATE OF SOUTH-WEST AFRICA.

THE CO-OPERATIVE BANK OF WINDHUK. — *Deutsche Landwirtschaftliche Genossenschaftspress*, No. 23. Berlin, 15 December 1921.

The general meeting of the Co-operative Bank of Windhuk was held on 18 May 1921, when the following matters were discussed.

It was stated that the German law of 1 May 1889 relating to co-operative associations had been adopted in November 1920, *mutatis mutandis*, by the Administration of the Protectorate, so that the legal position of the Bank had thereby become confirmed afresh. The danger of compulsory dissolution of the Bank was thus at an end.

The difficulties accompanying the sale of all agricultural products had been a cause of serious embarrassment to the farming class, an embarrassment the more acute from the international financial crisis and the extreme caution of the banks and capitalists. But as the trading area of Windhuk was affected only inconsiderably by the after effects of the War and as the Society had adopted a thoroughly practical attitude as regards the alteration of the currency of the country (from paper marks to shillings) the general position of the Bank was completely satisfactory. The balance-sheets would appear as previously in shillings and in paper currency, but during 1921 all trading accounts would be kept in English currency. The total turnover in 1920 amounted to 10,450,489 shillings and marks, of which sum the turnover in paper marks only formed about a sixth. The Society's owned capital included: (a) share capital 50,000 shillings; (b) reserve fund, 49,586.32 shillings and 125,413.68 marks; (c) trading fund No. 1, 65,000 shillings and (d) trading fund No. 2 (specially set aside during the war) 20,000 shillings; in all 184,586.32 shillings and 125,413.68 marks. The net profits amounted to 31,901.51 shillings and 12,992.77 marks. The following division of the net profit was proposed: 4,000 shillings to be appropriated as 8 per cent. dividend on the shares; 5,000 shillings to be transferred to the trading fund No. 1; 20,000 shillings to the trading fund No. 2; and 2,901.51 shillings to be carried forward to the following year. The whole of the profits in German paper money (12,992.77 marks) would have to be appropriated to the relief of the acute situation in regard to the price of meat.

The number of members was 133 and their total liability 665,000 shillings.

It was proposed that retiring members should not be at once repaid the amount of their shares, but that the first payment should be made on 1 April 1924, in accordance with the moratorium laid down in the regulations concerning the currency. Further steps were to be taken to obtain credit from the Land and Agricultural Bank on the ground that the German Agricultural Bank, of which this bank is the successor, always considered the fostering of agricultural co-operation as among its principal functions.

M. T.

SWITZERLAND.

THE PRESENT POSITION OF THE DAIRY FEDERATIONS. — *Le Paysan Fribourgeois*. Fribourg, 20 January 1922.

The Central Union of Swiss Milk Producers, founded in 1907, comprises 25 federations with 98,066 members owning 516,927 cows. The oldest federation is the Agricultural Dairy (*Laiterie Agricole*) of Lausanne, founded in 1895, which includes at the present time 875 members, owning 3,560 cows; the last to come into existence was the Valais Federation of Milk Producers, founded in 1919, which already numbers 4,500 members owning 12,270 cows. In order of importance come: the Federation of the Berne Cheesemaking and Dairy Societies, founded in 1906 with its 19,945 members owning 132,826 cows, and the Federation for the North of Eastern Switzerland of Cheesemaking and Dairy Societies, founded in 1906, with its 15,178 members owning 59,649 cows: the Federation for the North of Western Switzerland of Cheesemaking and Dairy Societies, founded in 1904, comes third with 8,118 members owning 31,735 cows. The smallest federation is the Federation of the Milk Producers of Nidwalden, founded in 1916, with 92 members owning 388 cows. M. T.

UNITED STATES.

1. THE FLORIDA CITRUS EXCHANGE IN 1920-21. *Florida Grower*, Vol. XXIV, No. 13. Tampa (Florida), 24 September, 1921.

The annual report of the Florida Citrus Exchange for the year ending 31 August 1921 shows the year to have been the most successful in the history of the organization as regards the number of boxes of fruit handled, number of local associations affiliated, number of new members registered and the number of northern markets in which fruit was sold. The exchange handled 32 $\frac{1}{4}$ per cent. of the citrus crop of the state, which was twelve million boxes, and figures show that the organization is growing faster than the increase in the citrus crop of the state. Sixty-four new northern markets were opened and carload sales effected, and eleven new packing houses are under construction; the volume of fruit which will be handled this season, exclusive of the additional tonnage of the Standard Growers' Exchange, which amalgamated with the Florida Citrus Exchange during the year, is estimated at a very large increase over last season.

It is estimated that the increased freight charges cost the growers \$2,400,000 above the normal transportation costs. The Exchange has, however, obtained a reduction in freight charges of thirty-six cents per box on grapefruit on the lines running to Montana, Oregon and Washington, thus enabling those distant markets to be re-opened.

Four precooling plants are now in operation and, it is estimated, will enable 500,000 boxes of precooled fruit to be handled per season, with a saving of forty-five dollars per car in refrigerating cost, whilst reducing decay in transit very materially.

The report states that advertising was carried out during the year on a larger scale than hitherto and that the results were satisfactory.

W. E. H. L.

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2. CALIFORNIA GROWERS' AND SHIPPERS' PROTECTIVE LEAGUE. — *California Fruit News*, Vol. 64, Nos. 1737 and 1738. San Francisco, 22 and 29 October 1921

Early in October 1921 the shippers and organized growing interests connected with the deciduous fruit industry of California formed a protective league known as the California Growers' and Shippers' Protective League. The League will work on similar lines to the Citrus Protective League. Its objects are to protect the interests of the growers and shippers in securing just and equitable freight rates; to protect the industry against any unjust discrimination or exaction on the part of carriers; and to promote the general welfare and to assist in building up the deciduous fruit industry in California.

Individuals, firms, corporations or associations, in any part of California, undertaking a deciduous fruit shipping business are eligible for membership, the fees being quite nominal.

Already most of the parties interested are members of the league, the principal office of which is in San Francisco. W. E. H. L.

Credit

FRANCE.

AGRICULTURAL CREDIT DURING THE WAR.

OFFICIAL SOURCES :

DÉCRET PORTANT RÈGLEMENT D'ADMINISTRATION PUBLIQUE RELATIF À LA CONSTATATION ET L'ÉVALUATION DES DOMMAGES RÉSULTANT DES FAITS DE GUERRE (20 July 1915). *Journal Officiel de la République Française*. Paris, 23 July 1915.

LOI RELATIVE À LA MISE EN CULTURE DES TERRES ABANDONNÉES (4 May 1918). *Journal Officiel de la République Française*. Paris, 8 May 1918.

DÉCRET PORTANT RÈGLEMENT D'ADMINISTRATION PUBLIQUE POUR L'APPLICATION DE LA LOI DU 4 MAI 1918, RELATIVE À LA MISE EN CULTURE DES TERRES ABANDONNÉES (12 July 1918). *Journal Officiel de la République Française*. Paris, 13 July 1918.

CHAMBRE DES DÉPUTÉS : RAPPORT FAIT AU NOM DE LA COMMISSION CHARGÉE D'EXAMINER LE PROJET DE LA LOI PORTANT FIXATION DU BUDGET ORDINAIRE DES SERVICES DE L'EXERCICE 1919 (AGRICULTURE), PAR M. ADRIEN DARIAC, DÉPUTÉ (SESSION DE 1919, SÉANCE DU 22 MAI 1919, ANNEXE N° 6164).

RAPPORT DU MINISTRE DE L'AGRICULTURE SUR L'APPLICATION DE LA LOI DU 4 MAI 1918 RELATIVE À LA MISE EN CULTURE DES TERRES ABANDONNÉES. Paris, 1920.

RAPPORT PRÉSENTÉ À LA COMMISSION PLÉNIÈRE DE L'OFFICE NATIONAL DU CRÉDIT AGRICOLE PAR LE CONSEIL D'ADMINISTRATION DE L'OFFICE. Paris, 1921.

There has been in France little development of agricultural credit other than co-operative. This is due to the fact that the needs of agriculturists are effectively met by co-operative credit, for which capital has been provided on a large scale. Even in dealing with matters apparently in no way germane to co-operative credit, such as loans for the purchase of small holdings granted to ex-service men in receipt of pensions or to civilian sufferers by the war, the State only grants credit through the medium of co-operative banks, with the aim of thus enrolling fresh support for the cause of co-operative credit.

Non-co-operative credit has been employed in two directions only as an outcome of the war :

1. Advances of compensation due for damage resulting from the war.
2. Loans for recultivation of abandoned lands.

We will proceed to consider these in order.

§ I. ADVANCES OF COMPENSATION DUE FOR WAR DAMAGE.

As early as 1915, a Decree (dated 20 July of that year) provided (Article 34) for the payment of sums on account to private persons who had suffered material losses as a result of acts of war. In principle these payments could only be made after the damage had been verified and its amount estimated by a Cantonal Commission, but it was laid down by instructions of the Agricultural Department of the Ministry of Agriculture, dated 30 June 1917, that immediate advances in kind, intended to facilitate recultivation or the gathering of crops, could be granted through the medium of the prefects of the department and their technical staff to agriculturists who had incurred losses in the regions where the Commissions for estimation of damage had not yet been able to get to work. Such advances consisted of allocations of seeds, fertilizers, agricultural implements, draught animals and other live stock. In each department arrangements had been made for a purchasing commission to buy live stock, seeds and agricultural machinery. As the goods purchased were delivered, the applications of farmers who had incurred losses were met, such allowances being regarded as payment on account of compensation for war damage. The allowances were granted only to those whose losses made such immediate advances necessary, to the exclusion of persons who were in a position, apart from the damage whatever might be its magnitude, to await the normal course of procedure.

By the circular of the Ministry dated 21 October 1918, new provisions were added, of which the following is the substance :

Advances which may amount to 1,000 francs and exceptionally to 2,000 francs a hectare, but may not exceed the amount of the loss incurred (pre-war valuation) are made to farmers in the liberated districts who return to their former farms. Out of the sum awarded 400 francs a hectare may be set aside as a working fund to meet necessities of life, small purchases, wages of labourers until the first harvest has been gathered. The remainder must be spent on purchases of live stock, supplies and seed.

In order to obtain these advances the person concerned must apply to the prefect of the department, stating, as well as the amount of the advance for which he asks : (1) his urgent reason for having recourse to this advance in order to restore his farm to working condition ; (2) the kind and size of the farm he wishes to restore ; (3) the resources he reckons on employing to this end ; (4) the exact needs which the advance is to meet.

To this application a detailed statement is annexed of the losses incurred, attested by two witnesses who are well known in the farming world of the district, and certified by the mayor.

A special departmental committee, which meets every week, fixes within a fortnight the amount of the advance to which the applicant is entitled. This bears no interest and is repayable out of war damages.

The advances just described relate only to the restoration of culti-

vation. To the Ministry of the Liberated Regions, there are also attached technical reconstruction departments to whom belong the work of repairing and rebuilding dwellings, as well as the construction and fitting up of temporary houses and shelters. The farmer who wishes to repair his buildings can obtain allowances in instalments, in kind or in cash, equal to three quarters of the value of the damage done, if he apply for such allowances for the purpose of works of construction urgently needed. Exceptionally, the allowances may amount to 90 per cent. of the valuation in the case of urgent work entrusted for execution to a co-operative society for reconstruction.

Stocks of temporary houses are, by the efforts of the administration, in course of manufacture. The person whose house has been destroyed can apply to the prefecture and obtain the grant of a temporary house, either as a free loan, or for a rent amounting to 3 per cent. of the net cost, or by buying it for 50 per cent. of the net cost.

Advances are also made for household refurnishing: these may amount to 1,000 francs for the head of a family, and 200 francs for each person dependent on him who is not an earner, but they must not exceed the amount of his loss.

§ 2. CREDITS FOR RECULTIVATION OF LAND.

The second class of loans which we are to describe emanates from the Law of 4 May 1918 relating to the cultivation of abandoned lands. This law as a matter of fact opened a credit of 100 million francs with the Ministry of Agriculture for the purpose of granting loans, without interest, to farmers and to agricultural associations who were ready to undertake the cultivation of the abandoned lands.

A decree of 12 July 1918 charged the departmental agricultural committees in each department (1) to investigate the applications, to grant loans, and to see that the money advanced was properly used. Further this same decree charged the Office for the Inspection of Agricultural Associations and Credit Institutions, at the Ministry of Agriculture, to supervise the use of the funds by the committees as well as by the borrowers.

Loans were granted to the departmental committees by the Minister of Agriculture, according to the advice of a distribution committee established by article 1 of the decree in question.

The maximum loan was fixed at 250 francs per hectare of cultivable land, in the case of small parcels of deserted land, and up to 1,000 francs per hectare in the case of whole estates. When the beneficiaries were

(1) The Departmental agricultural committees had been formed a little earlier by a Decree of 14 January 1918. They were composed of the prefect, who acted as chairman, of the director of technical agriculture and of one farmer for each district (*arrondissement*) chosen by the prefect from a list of two names, drawn up by the agricultural associations of the department.

farmers natives of the liberated districts, the loan was increased to 500 francs per hectare for uncultivated parcels of land and 2,000 francs per hectare for whole estates.

The loans to farmers were granted at first for a period not ending later than 31 December of the year in which the agricultural year for which the loans were made came to an end, but the Decree of 12 July 1918 accorded to the borrowers facilities for repayment by authorizing the agricultural committees to renew the loans on condition of the repayment on account of one fifth or one tenth of the loan according to whether the farmer belonged to the inland zone or was a native of the devastated districts.

From 4 May 1918 to 11 May 1919 the law was administered directly by the Commissioner for Agriculture. Since 11 May 1919, the Commissioner for Agriculture having retired, the Office for the Inspection of Agricultural Associations, which was entrusted with the supervision, has been given also powers to direct the application of the law.

At the outset it was of the utmost importance to act rapidly, owing to the enormous difficulties which the supply of cereals for the troops in the field and the civil population entailed. By constantly urging on the departmental committees the Commissioner for Agriculture greatly increased, in the shortest possible time, the amount of land under cereals.

The rapidity with which it was necessary to act, joined to the lack of experience of new bodies such as the agricultural committees, brought about an interpretation of the law in a very wide sense and loans have been granted for the repayment of which the necessary securities have not always been given.

Up to 11 May 1919 the application of the law has produced the following results:

Number of loans	1,617
Total amount of loans granted	57,204,586 frs.
Total number of hectares put under cultivation	101,644

The average area of farms put into cultivation, during this period, was about 62 hectares, and the average amount of the loans granted was 35,300 francs.

After the Commissioner of Agriculture retired, the Office for the Inspection of Agricultural Associations and of Credit Institutions, entrusted thenceforth with the application of the law, immediately initiated an investigation into the transactions of the departmental agricultural committees.

Taking into consideration the facts disclosed and the new needs caused by the termination of the war and the liberation of the invaded districts, the Minister of Agriculture was of opinion that important changes should be made in the way in which the law was administered,

Some improvements were effected by simple instructions given to departmental committees in current correspondence. Thus they were told to take advantage of applications for the renewal of loans to demand of all borrowers substantial security for repayment if such had not been given when the loan was granted. The departmental committees were also instructed to reject applications for loans for the development of lands which had been merely "neglected" and were not lands to which the law was intended to apply.

Finally a ministerial circular of 22 August 1919 defined the conditions on which loans were to be made in applying the law of 4 May 1918.

Loans may only be granted :

- (a) in the liberated districts, to all farmers or co-operative agricultural societies who intend to cultivate lands which have been deserted ;
- (b) in the rest of France, to demobilized farmers and to co-operative agricultural societies who wish again to cultivate lands which have been deserted.

In order to help the greatest possible number of farmers, the committees were recommended to grant large loans only in quite exceptional cases. Further in many cases instructions were given to the committees that without respect of persons they should grant loans in priority to fathers of large families and to occupiers of medium-sized and small holdings. Borrowers were required to furnish special security for repayment in the shape of warrants, bonds, charges on compensation for war damages, mortgages, etc. Finally borrowers were required to be members of some agricultural association and to furnish references as to their capability as farmers.

So as to assist the revival of agricultural activity in the liberated regions, the Minister of Agriculture decided, in agreement with the prefects, to make important deductions from the credit apportioned to the inland departments so that they might be given to the departments which suffered invasion, the needs of which are continually increasing.

The results thus obtained between 14 May 1919 and 31 December 1919 were as follows :

Number of loans	1,046
Total amount of loans granted.	27,379,568 frs
Total number of hectares put under cultivation	37,128

The average area of farms put under cultivation during this period was only 35 hectares, and the average loan granted was 26,100 francs.

From 1 January to 31 May 1920 nearly 10 millions of francs, the result of reducing the credits granted to inland departments, were put at the disposal of the agricultural committees of the liberated districts, which had received, when the law expired (agricultural season 1919-20) the following total loans :

Aisne	11,500,000 francs
Ardennes	6,500,000
Marne	2,685,000
Meurthe-et-Moselle	1,050,000
Meuse	2,250,000
Nord	* 2,055,999
Oise	7,700,000
Pas-de-Calais	2,220,000
Haut-Rhin	50,000
Seine-et-Marne	7,500,000
Somme	3,800,000
Vosges	50,000

Total credits allocated to the invaded
departments 47,360,999 francs

To sum up, up to 31 December 1919, out of 99,190,000 francs credits opened in favour of the committees, these had granted 84,584,154 francs in loans to 2,663 farmers, for the cultivation of 138,863 hectares. Out of 2,663 borrowers, 1,125 were refugees or farmers of the liberated regions to whom 54,890,148 francs were granted as loans.

Up to 31 May 1920, out of 100 millions of francs credits opened in favour of the committees, these had granted 91,299,354 francs in loans to 3,168 farmers, for the cultivation of 168,132 hectares. Out of 3,168 borrowers 1,450 were refugees or farmers of the liberated regions, to whom had been granted 60,880,998 francs as loans.

The law of 5 August 1920 relating to co-operative credit and agricultural co-operation has entrusted to the National Office of Agricultural Credit the administration of the credits voted in accordance with the Law of 4 May 1918, relating to the recultivation of deserted lands. These credits represent for the Office a debt to be recovered. In fact at the end of October 1921, 36,500,000 francs approximately had already been repaid, but it is possible and indeed probable that the whole of the debt will not be recovered. Indeed, article 7 of the Law of 4 May 1918 stated explicitly that where deficits occurred in connection with farms to which loans had been granted no suit could be brought against those farming it for recovery, except in case of fraud. However the fact that the total of repayments between 1 June 1920 and 1 November 1921 has exceeded 4,395,512 francs is sufficient indication of the good faith of the borrowers and of the success of their efforts.

M. B.

MISCELLANEOUS INFORMATION RELATING TO CREDIT.

ALGERIA.

A CREDIT OF TEN MILLION FRANCS FOR VINE-GROWERS. — *La Voix des Colons*.
Algiers, 5 February 1922.

A crisis of some severity is just now affecting vine-growing in the department of Algiers. It has arisen in consequence of the restriction of banking credit, together with the total failure of the 1921 crop in certain districts, a failure which appreciably affected the attitude of the financial houses.

As a means of relieving the situation, the Agriculturists' Confederation of Algiers, after numerous preliminaries, succeeded in concluding an agreement with the Bank of Algeria and with the *Crédit Foncier et Agricole d'Algérie*, which through the medium of the Regional Agricultural Co-operative Credit Bank of Algiers and the Central Credit Bank agreed to the opening of a credit of ten million francs in favour of vine-growers who had suffered losses, and who were members of the Agriculturists' Confederation of the department of Algiers.

The Regional Agricultural Co-operative Credit Bank of Algiers and the Central Credit Bank laid down the following conditions for the apportionment of this credit.

It was decided that the transactions should be effected under the auspices of either bank at the borrowers' choice, but that there should be unity of action, in so far as that the two banks constitute one discounting body, whose business it is to examine all applications for credit and to give them such furtherance as is admissible in each case.

The vinegrowers of each commune are to form one or more groups and to be jointly and severally liable for the repayment of the advances which may be made to their group.

For this purpose, they will draw up a collective application for loans, in which they will fix by mutual agreement the credits that are actually necessary at the moment. Printed forms of application will be available. These will distinguish between credits required for equipment, and credits required for labour.

In the case of isolated applications, either their affiliation to a group will be considered, or the establishing of a satisfactory guarantee.

Payments for equipment will be arranged by the regional agricultural co-operative credit banks, on the presentation of invoices by the firms supplying the goods, and in accordance with instructions given by the borrowers.

Credits required for payment of wages will be arranged on a graduated scale up to the time of the vintage, according to information supplied by the communal groups.

The discounting body formed by the two banks will reserve to itself the discussion of the total of the credits applied for by the communal bodies and of the securities offered.

Each borrower must consent to pay into a special guarantee fund ten per cent. of the total of credit applied for. This ten per cent. is employed in the current and ordinary operations of the *Crédit Agricole* for subscribing to the share capital of the local banks.

On occasion, when the transactions to be undertaken with the vine-growers seem to be of a special character, this 10 per cent. will not be converted into shares until after the completion of the transactions and if the borrowers then desire to remain clients of the co-operative agricultural credit bank; if not, it will be returned to them.

Up to then the guarantee payments will be carried forward to a waiting account and will serve to cover losses which might arise from loans before the coming into force of the joint and several guarantee of the communal groups. The sums thus built up as a guarantee fund will produce up to 6 per cent. interest. This interest will be paid as soon as repayments are made to the guarantee fund and in proportion to them.

EGYPT.

THE LAND BANK OF EGYPT IN 1920-21. — REPORTS OF THE ADMINISTRATIVE COUNCIL AND OF THE CENSORS. FINANCIAL YEAR 1920-21. Alexandria, 1921.

The Land Bank from its foundation in 1905 up to the close of the financial year 1920-21, granted 3,182 loans repayable by instalments, and effected 390 sales of property of which the price was payable by instalments, making a total of 10,368,219 Egyptian pounds, or 268,780,802.52 francs advanced. Of these 90 loans were granted and seven sales were effected during the financial year 1920-21, the amount advanced being 344,418 Egyptian pounds, or 8,928,529.15 francs. The instalments of repayment and interest amounted to 4,249,854 Egyptian pounds, or 110,171,148.99 francs, of which 209,245 Egyptian pounds, or 5,424,380.06 francs were received in the financial year. As, on the other hand, that portion of the annual charges which represents the instalment of capital repaid was 2,456,792 Egyptian pounds or 63,688,724.28 francs of which 223,836 Egyptian pounds or 5,802,623.85 francs belong to the year 1920-21, the balance outstanding on 30 September 1921 was 3,661,571 Egyptian pounds, or 94,920,864.91 francs.

Fifty-six current accounts guaranteed by mortgages were opened from 1905 to 1921, representing a capital of 609,522 Egyptian pounds, or 15,800,963.52 francs. In the course of the financial year four credits of this kind were opened, representing 14,300 Egyptian pounds or 360,706.41 francs. As on the other hand, expired loans, repayments and unutilized credits amounted to 514,434 Egyptian pounds, or 13,335,957.25 francs the balance outstanding was 95,087 Egyptian pounds, or 2,465,006.27 francs.

Adding together the mortgage loans repayable by instalments and the

current accounts guaranteed by mortgage still open on 30 September 1921, a total of 3,756,659 Egyptian pounds is obtained, or 97,385,871.19 francs, to which should be added 84,203 Egyptian pounds or 2,182,841.68 francs, due in respect of the sale of lands upon which the Bank foreclosed. The total of mortgage operations thus comes to 3,840,863 Egyptian pounds, or 99,568,712.87 francs.

It is interesting to note that nearly all the current loans have been granted on rural property. This is clear from the following table.

Nature of loans	Number	Amount outstanding (Egyptian pounds)
Rural loans	1,995	3,462,927
Urban loans	89	256,452
Loans of a mixed character . . .	6	37,280
	2,090	3,756,659

We may add that the Land Bank makes short-terms loans for agricultural purposes and within the limits of the yield from their land under cultivation to borrowers whose lands are already mortgaged. These advances amounted for the financial year to 36,777 Egyptian pounds, or 953,407.15 francs.

M. B.

HOLLAND

MORTGAGE CREDIT IN 1920. — JAARCYFERS VOOR HET KONINKRIJK DER NEDERLANDEN
(*Statistical Year-book of the Kingdom of Holland*), Year 1920. The Hague, 1921.

During the year 1920 there was a still more marked increase in mortgage indebtedness in Holland as compared with the figures of the previous year (1). The following table will make this clear.

(1) See the *International Review of Agricultural Economics*, March 1921, page 124.

TABLE I. — Amount (in thousands of florins) of New Mortgages,
classified according to the Nature of the Debt.

	1920	1919	1918	1917	1916	1915	1914
Mortgages representing loans:							
Taken by mortgage banks on rural property	7,942	12,059	11,576	9,786	8,914	5,527	6,894
" " " buildings	106,669	128,345	105,786	103,451	78,506	39,402	38,467
Taken by other banks and institutions on rural property.	91,124	62,466	40,482	25,406	17,175	10,908	16,866
" " " " buildings	331,875	211,012	153,992	96,721	68,735	37,954	51,291
Taken by individuals on rural property.	69,394	65,421	57,518	43,692	40,293	23,655	34,722
" " " buildings.	242,193	164,212	111,914	92,217	68,833	42,613	64,095
Mortgages resulting from purchases not completely paid for and unequal ities in the division of inheritances.	34,894	29,347	22,882	15,729	15,627	9,913	10,900
Mortgages representing annuities for life or perpetual annuities	427	363	347	371	140	255	231
" conditional or eventual debts.	10,427	4,786	4,614	3,649	3,747	4,642	4,015
Mortgages of which the origin has not been ascertained:							
Taken by mortgage banks on rural property.	2	14	26	49	129	9	57
" " " buildings.	650	47	210	210	1,028	467	420
Taken by other banks or institutions on rural property	4,361	2,590	2,249	2,249	1,784	750	1,294
" " " buildings	19,145	8,716	5,639	5,639	6,825	2,807	7,036
Taken by individuals on rural property.	14,545	12,524	12,580	12,580	7,250	4,946	5,994
" " " buildings	47,348	34,624	26,549	26,549	16,082	8,516	14,191
Miscellaneous mortgages	427	519	815	815	94	526	296
Total	981,333	737,645	557,180	557,180	335,162	192,891	256,770

The following table shows the mortgages classified according to the amount of the debt for which they form the security :

TABLE II. — *Classification of Mortgages Registered in 1920 according to the Amount of the Debt.*

	Number	Amount
		florins
Debt of 1 to 200 florins	117	15,114
" " 200 to 300 "	396	88,518
" " 300 to 1,000 "	7,437	4,585,590
" " 1,000 to 5,000 "	46,268	112,288,362
" " 5,000 to 10,000 "	19,134	125,620,383
" " 10,000 to 20,000 "	13,061	168,063,297
" " 20,000 to 30,000 "	4,297	97,892,227
" " 30,000 to 50,000 "	2,816	100,923,571
" " 50,000 to 100,000 "	1,647	104,371,319
" " 100,000 florins and over	1,021	267,484,481
Total	96,194	981,332,862

Classified according to the rate of interest, the mortgages registered in 1920 are as follows :

TABLE III. — *Classification of the Mortgages registered in 1920 according to the Rate of Interest.*

	Number	Amount
		florins
Without interest	888	12,850,231
Less than 3 %	22	125,100
From 3 to 3 ½ %	103	580,063
" 3 ½ to 4 %	105	702,702
" 4 to 4 ½ %	4,243	22,182,349
" 4 ½ to 5 %	7,559	44,686,578
" 5 to 5 ½ %	28,274	155,263,197
" 5 ½ to 6 %	16,097	146,976,356
" 6 to 7 %	24,041	243,074,346
" 7 % upwards	2,283	27,419,155
Rate not ascertained	12,519	327,462,785
Total	96,194	981,332,862

The mortgages outstanding on 31 December 1919 and 31 December 1920 were classified as shown in Table IV (page 212).

The amount of the mortgage loans granted by the 52 mortgage banks carrying on business in Holland reached 594,113,000 florins at the end of 1920. To these figures must be added 1,614,000 florins lent by two colonial mortgage banks (1).

(1) For one of these banks the total for 1919 was not entered, as the report for 1920 had not been received.

TABLE IV. — *Mortgages Outstanding on 31 Dec. 1919 and 31 Dec. 1920.*

Rate of interest	On 31 December 1919			On 31 December 1920		
	Number	Amount in thousands of florins	Amount as % of total	Number	Amount in thousands of florins	Amount as % of total
Without interest . . .	3,535	28,413	0.93	3,325	33,093	0.94
Less than 3% . . .	335	1,878	0.06	314	1,867	0.05
From 3 to 3 1/2 % . . .	1,856	11,910	0.39	1,765	11,813	0.34
" 3 1/2 " 4 % . . .	4,524	24,367	0.80	4,089	20,681	0.59
" 4 " 4 1/2 % . . .	111,094	519,422	17.07	99,516	443,907	12.63
" 4 1/2 " 5 % . . .	160,112	973,533	32.00	144,156	882,690	25.11
" 5 " 5 1/2 % . . .	147,176	709,418	23.32	154,833	760,374	21.63
" 5 1/2 " 6 % . . .	8,735	100,739	3.31	27,877	228,633	6.50
" 6 " 7 % . . .	8,518	73,402	2.41	29,076	292,289	8.31
7 % upwards . . .	534	6,101	0.20	2,555	30,895	0.88
Rate not ascertained	39,947	593,576	19.51	45,341	809,532	23.02
Total . . .	496,966	3,042,760	100.00	508,457	3,515,773	100.00

The following table shows the loans granted up to the end of 1914 and of 1920 by the more important mortgage banks.

TABLE V. — *Loans Granted up to the end of 1914 and of 1920 by the Principal Mortgage Banks.*

Name of bank	1914 (in thousands of florins)	1920 (in thousands of florins)
Algemeene Friesche Hypotheekbank	5,547	9,902
Algemeene Hypotheekbank	16,080	17,642
Amsterdamsche Hypotheekbank	20,035	19,792
Arnhemsche Hypotheekbank	10,075	11,703
Bataafsche Hypotheekbank	9,842	10,380
Dordrechtse Hypotheekbank	6,525	14,575
Eerste Nederlandsche Hypotheekbriefbank	14,006	14,709
Friesch-Groningsche Hypotheekbank	27,042	39,159
s'Gravenhaagsche Hypotheekbank	18,788	18,563
Haarlemsche Hypotheekbank	17,002	21,484
Hollandsche Hypotheekbank	17,340	20,909
Hypotheekbank voor Nederland (Algemeene Waarborg Maatschappij)	15,839	19,326
Maastrichtsche Hypotheekbank	10,153	11,979
Maatschappij voor Hypotheek Crediet	12,500	18,885
Nationale Hypotheekbank	46,255	44,547
Nederlandsche Hypotheekbank	28,999	38,535
Rotterdamsche Hypotheekbank	48,666	42,601
Utrechtsche Hypotheekbank	25,996	31,286
Veendammer Hypotheekbank	4,327	12,811
Westlandsche Hypotheekbank	27,827	32,105
Zuider Hypotheekbank	7,802	12,471
Zuid-Hollandsche Hypotheekbank	20,963	20,333

H. M. R. L.

UNITED STATES.

1. THE IOWA FARM CREDIT CORPORATION. — ANDREW (I. A.): Iowa's Farm Credit Plan. *The Banker-Farmer*. Vol. VIII, No. 8. Champaign (Illinois), July 1921.

In order to improve the marketing of farm products and to relieve the financial stringency which periodically disturbs Iowa farming and banking business, the Iowa Farm Bureau and the Iowa Bankers' Association formed, early in 1921, the Iowa Farm Credit Corporation. The Corporation has an authorized capital of five million dollars, and at the last Legislature the banking laws were amended to enable state and savings banks and trust companies to invest in the stock of the Corporation up to 10 per cent. of their capital and surplus.

The working of this scheme may be illustrated as follows: the farmer, having stored his produce in a properly licensed elevator or warehouse, takes the receipt to his local bank, who will advance him up to 75 per cent. of the market value of his produce. The bank may then endorse the note and rediscount it with the Corporation, thus getting its money to lend to other farmers under similar conditions. Or if the farmer desires, he can go straight to the Corporation for his loan, or the bank may act as the agent for the Corporation. In any case the note signed will be the regular collateral note which will provide that the margin of safety in regard to the value of the produce will be kept at all times, or the produce sold. The Corporation may then put up these notes with an approved trustee and issue debentures, up to the maximum value of the notes, and sell them in any part of the country. It thus receives its money back and may reloan its capital to the farmer as often as it can sell its debentures. Such debentures have four forms of security, the capital stock of the Corporation; the farmer's personal obligation; the warehouse receipt and the produce represented by it; and the bank's endorsement and complete responsibility.

W. E. H. L.

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2. THE AMERICAN LIVE STOCK LOAN POOL. — *Northwestern National Bank Review*, Vol. XIII, No. 6. Minneapolis, September 1921.

The pressing need of the American live stock loan pool (1), which amounts to \$50,000,000 was demonstrated by the flood of requests which poured in immediately the fund was established. Within the first week, before a settled office system could be established, applications for loans were accepted for a sum amounting to 8 per cent. of the total amount of the pool. By 23 August 1921, about six million dollars had been lent or promised. The head-quarters of the enterprise, the Stock Growers' Finance Corporation, have been established in Chicago, and advisory

(1) See our issue of December 1921.

committees have been formed in the states where the demands for such loans chiefly originate, for the purpose of effecting greater speed and safety in making advances.

Loans are made to stock growers only through local banks or cattle loan companies which are familiar with their credit standing. Except as specified below, these loans are made for sums not less than \$5,000, on a basis not to exceed 75 per cent. of the value of the live stock (cattle or sheep), and must be accompanied by a detailed report of a competent inspector as to the animals offered for security. The one exception to the rule of \$5,000 as the minimum loan is that advances made on cattle for fattening will be accepted for amounts as low as \$2,000. The borrower's note, endorsed by the bank or loan company submitting it, must be accompanied by a certified copy of the original chattel mortgage securing it, a financial statement of the maker of the note, and an abstract of the chattel mortgage records showing that there are no conflicting mortgages on file. All loans must be eligible for rediscount with the Federal Reserve Banks. Maturities are stipulated to be six months or less, but these will be extended or renewed for periods of six months, the entire period not to exceed thirty months from the date of the loan. State banks must not submit loans of a size exceeding 10 per cent. of their paid-in capital and surplus, though in some cases where the capital stock of a bank has not been sufficiently large, guarantees by officers, directors and stockholders will be accepted in lieu of the endorsement of the bank. Applications must be submitted to the advisory committee in the state where the application for the loan originates.

A great many loans on stock cattle for amounts below \$5,000 have been submitted but have not been considered. The placing of the minimum at this amount has caused some adverse comment. The reason given is the need of extending the greatest possible relief in the shortest time, and the inability of the organization, which is being conducted as economically as possible, to deal with the flood of small applications. The amount of the pool is not sufficient to rehabilitate the industry, but the pressure is being relieved where it is greatest. Many banks which have never before handled live stock loans are joining the movement. It is said that the organization has already prevented many stock cattle needed for breeding purposes from going to market. W. E. H. L.

URUGUAY.

THE APPLICATION OF THE LAW RELATING TO AGRICULTURAL PLEDGES.—
 DECRETS: ESTABLECÉSE EN LA INSPECCIÓN NACIONAL DE GANADERÍA Y AGRICULTURA UNA SECCIÓN DENOMINADA "ECONOMÍA Y CRÉDITO RURAL". *Diario Oficial*, No. 4,203. Montevideo, 18 June 1920. — *La Propaganda Rural*, Year XIX, Nos. 443, 451, 459. Montevideo, 1921.

In earlier issues (1) mention has been made of the Law of 21 March 1918, establishing a system of loans to farmers in Uruguay granted out

(1) In the *International Review of Agricultural Economics*, August 1918, p. 661, and January-February 1919, p. 84.

pledge of produce or goods, and arranging the appropriate form of agreement. This law had for some time past been the subject of many anticipations on the part of farmers and stock-breeders, and we have already drawn attention to its importance as a credit system with particularly smooth working, and one that facilitates the obtaining of credit needed for agricultural industries, and renders possible the circulation of a mass of capital that would otherwise remain stagnant and unproductive. The Bureau of Economy and Rural Credit, instituted by the Law of 18 June 1920, as a section of the National Inspectorate of Stock-breeding and Agriculture, supplies data as to the working of the law of agricultural pledges. This Bureau collaborated with the Bank of the Republic by giving technical advice in regard to the putting in force of this Law and of the Regulations for its application, and offered its services in the matter to other credit institutions, the rural banks, etc. In virtue of one of the powers conferred on it by the law that constituted it, the Bureau is moreover engaged in the organization of the loan system, in the study of agricultural credit in general, and more especially in credit on the security of rural movable property.

As we have already stated in our earlier articles, the Law of 21 March 1918 conferred the power of making loans on the Bank of the Republic, on other credit institutions, on business establishments keeping their books on a regular system, and on the rural banks.

The same year a new Decree dated 18 June arranged for the gradual application of the system and limited the number of the lending institutions to the credit institutions only, and to private business houses with books registered in the department of Canelones.

The Bank of the Republic, in agreement with the Section of Economy and Rural Credit, next decided to classify the credit operations according to the kind of goods pledged. In conformity with Article 3 of the Law of 21 March 1918, these may be as follows :

- (a) Live stock and animal produce.
- (b) Movable property employed in rural operations ;
- (c) Fruit of any kind, provided it is of the same agricultural year as that in which the agreement is made, whether ungathered or picked, as well as timber, mineral products or any products of the national industry.
- (d) Machines and implements for agricultural work.
- (e) Implements for manual or factory work.

As regards live stock, a further classification has been made :

- (a) Live stock in general.
- (b) Heifers of 18 months or over.
- (c) Pure bred bulls of 18 months or over.
- (d) Breeding ewes.
- (e) Dairy cattle including calves and bulls of 18 months and more.
- (f) Show breeding stock.

The maximum amount of loans on pledge of live stock is fixed at 20,000 pesos for fattening stock, 5,000 pesos for milk-cattle, and 50 per cent. of the insured value for pure bred breeding stock.

This kind of loan immensely facilitates the purchase of cattle by the farmers; in fact the purchaser in want of animals for his farm can obtain them at once, giving as security for his debt a pledge on the animals themselves. If young animals are purchased the debtor can sell them as soon as they are fattened and discharge his debt, capital and interest, to the creditor, for whom the animals have been sufficient guarantee in themselves during the time.

As regards loans exclusively agricultural, the directing body of the Bank up to now only grants them on cereals, fruit in store, and ungathered fruit: they are designed to facilitate harvest operations, threshing, etc.

The First Loans Granted. — The first loan on the security of an agricultural pledge, registered in Uruguay, was granted by the Bank of the Republic to the rural colony of San Javier. During the last few months of 1920 loans on agricultural pledge were granted to various official institutions.

On 13 December 1920 the first loan secured by the pledge of live stock was granted to private persons, so that loan operations involving live stock may be said to have begun to develop at the beginning of 1921: they have noticeably increased in extent in proportion as this system of credit has become known and appreciated in the Republic.

Interest at 7 per cent. was stipulated in the registered agreement for loans on the security of agricultural pledges. In one agreement only was a rate of 6 per cent. stipulated, and in another 6 $\frac{1}{2}$ per cent. but in others cases the rate was 7 per cent.

A New Bill to Provide for a Larger Extension of Loans. — The Section of Economy and Rural Credit, which has taken a most active share in the work of developing this new form of credit, has made a study of the question of extending it further in connection with stock-breeding and more especially with the dairy industry, an industry of capital importance in the Republic, where live stock still forms the main source of wealth.

It is thus proposed to grant credit to small stock-breeders and cultivators, not only for the purchase of dairy cattle, but also for their upkeep in suitable localities. As far back as 1911, at the Dairy Industry Congress held at Montevideo, attention was called to the importance that would attach to the establishment of a form of credit designed to suit dairy farmers for construction of milking-pens or sheds, for purchase of the utensils required for butter making, etc. We may note that dairy cattle and their calves represent a special form of security, equally for the creditor, who knows that these animals represent permanent capital in rural economy, as for the debtor, who can rely on being able in due course to repay the borrowed capital out of the profits on the sale of the milk as well as to pay the interest on it. Here may be specially noted a Bill put forward by the Section of Economy and Rural Credit, in accordance with which

the Executive would be authorized to guarantee up to 500,000 pesos in loans on pledge granted by the Bank of the Republic and by the other credit institutions, in view of the construction of *granjas*, or sheds where where the cattle can be collected, and of rural dairies.

In this Bill it is proposed that the loans should not ordinarily exceed 5,000 pesos. They might however amount to 10,000 pesos in the event of the borrower being an agricultural engineer holding a diploma recognized by the State.

The Bill also proposes :

(a) That the banks should be authorized to make advances on the security of an agricultural pledge up to 90 per cent. of the value of the pledge, if it is represented by breeding animals, and up to 50 per cent. if the security is agricultural machinery or implements.

(b) That it should be made possible to grant loans of this kind even at the actual time of the purchase or sale of the animals or other goods.

(c) That the lending bodies other than credit institutions should be enabled to increase the loans by 50 per cent. when the borrower is recognized as solvent by the lender and by the office on which it devolves to give the necessary information. In this case the guarantee given by the State would be proportionately increased.

On the interested parties there would only fall the obligation of guaranteeing the appropriation of the loans to the objects specified by the law.

The bill contemplates finally the extension of the same regulations to loans granted to every other kind or rural industry.

Agricultural Pledges and Insurance. — An important innovation that has been introduced into the system of loans on agricultural pledge has reference to the case where the goods constituting the security are insured.

The Bank of the Republic has in fact decided that where loans are secured on breeding animals insured in the State Insurance Fund, a loan may be granted on the security of the policy equal to 80 per cent. of the value of the animal.

In its turn, the State Insurance Fund has requested the Rural Sections undertaking cattle insurance to look into the possibility of reducing the premiums. It is true that the conjunction of insurance and loan results in the banks baying a much larger field of credit operations better guaranteed, and as a result a wider area of insurance : but it is also true that insurance premiums are at the present time so high, that in addition to the interest of the loan, and the charges for inspection, etc., very heavy annual charges fall on the debtor.

We may note as to this that the current premium varies from $8\frac{1}{2}$ per cent. to 10 per cent. of the insured animal, and though this may be considered equitable for certain animals, it becomes on the contrary almost prohibitive for others of much less value, so that the owner is

obliged to limit insurance to the animals intended to be shown or sold at a high price.

A very opportune proposal has been made to draw up statistics of pure bred stock, and thereby to set up a scale of insurance corresponding to the different classes of animal.

Once cattle insurance is re-organized on a more equitable basis, farmers will be able to take fuller advantage of the recent concession made by the Bank of the Republic.

This institution has moreover taken steps to facilitate the warehousing of grain. In view of the fact that the greater number of farmers have no suitable places for storing produce and that at some leading stations there is only a *Mercado de Frutos* or a co-operative depot, the Bank decided to grant loans up to the amount of 1000 pesos to farmers who would store their wheat in a private warehouse approved by the Bank, all the obligations as to the pledge then falling on the custodian instead of the debtor.

To complete the working of the system of loans on agricultural pledge, the system of *warrants* on fruit in store will also be developed: this is a form of credit that has been long desired by the agriculturists of Uruguay.

E. F.

Miscellaneous Questions relating to Agricultural Economy

ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

AUSTRIA.

MEASURES TAKEN DURING THE WAR TO MAINTAIN THE SUPPLY OF AGRICULTURAL LABOUR.

By Dr. HERMANN KALLBRUNNER

When the Austrian army was mobilized in August 1914, on the small farms the men called up were replaced by the wives and children of the farmers and even in some cases by their old parents. On the whole, owing to the extraordinary devotion with which these threw themselves into the work, the replacement was successful. Difficulty however was experienced in regard to the heavier kinds of work, usually performed exclusively by men, such as reaping, and also as to the work of certain seasons when it is customary to engage extra help. Hence it was necessary to have at command, at least for certain times of the year, some further resources in the way of labour.

The large farm, depending essentially upon hired labour, was in a much more serious position than the small farm at the outbreak of war. Owner, manager, farm-servants, day-labourers were often all withdrawn. Moreover many women whose services had previously been available could no longer give them as they had to work on their own land. Further as they were in receipt of the government allowances (1) paid to the wives and families of all the men called up there was no strong inducement to find other means of subsistence.

At first the large farms benefited, though only in a measure, by one special circumstance; the immense surplus of labour in the East was unable to emigrate, while the refugees from the Russian invasion of Eastern Galicia found their way into Western Austria and were

(1) In accordance with the Law of 26 December 1912, *Reichsgesetzblatt*, No. 237.

induced to take up agricultural occupations, so far as they were not called up for military service.

§ 1. THE HARVEST COMMISSIONS.

With the view of meeting so far as possible the difficult situation in which agriculture was placed, the Government issued a series of enactments.

By a Decree of the Ministry of Agriculture of 5 August 1914 (*Reichsgesetzblatt*, No. 200), all the communes of Austria in which farming is carried on were directed to set up Harvest Commissions (*Erntekommissionen*). These were to consist of three to seven persons, resident in the commune and of proved integrity, among them ministers of religion, teachers, and officials of the organizations representative of agricultural interests, meeting under the chairmanship of the burgomaster, to take all the measures necessary for securing the normal course of agriculture. An important share in the provision of the labour necessary was to devolve on these commissions. They were expected to organize mutual assistance amongst the owners or occupiers of land, and to direct along such lines as would lead to their fullest utilization, both the labour and the materials available in a commune or obtainable from without, so as to concentrate both labour and materials where the need was greatest or most urgent, always giving preference to those farms which in consequence of the calling up of the owner or manager required special consideration or assistance. In short the commissions, in the interest of the execution of all kinds of agricultural work, had the duty of ascertaining, on the one hand, the labour and materials available within the area of the commune, and on the other, the farms standing in need of help, and of assigning to these latter so far as their requirements were not met from voluntary sources, the labour, the draught animals and the implements necessary. All persons of either sex resident in the commune, except a few exempted for special reasons, were obliged to lend their services. The right to take remuneration for work so given was recognized only in the case of persons who depended for subsistence on receiving a daily wage or remuneration in some form or other.

As has already been mentioned, a certain number of women refused to do agricultural work, though their refusal was not justified by any considerations of health or household duties. As this involved a reduction in the supply of labour and as their refusal was calculated to encourage others similarly to object to work, the provincial authorities were directed to take the strongest possible measures, acting through the Harvest Commissions and in accordance with the Ministerial Decrees of 5 August 1914 and 15 February 1915 (*Reichsgesetzblatt*, No. 200 and No. 38) to ensure that all persons, so far as health and family reasons permitted, should be made available for agricultural work.

§ 2. LABOUR EXCHANGES.

Immediately after the outbreak of war, the Government began to take an active part in the placing of labour. The Decree of the Ministry of Agriculture of 7 August 1914, Z. 37,165, enacted that District Labour Exchanges should be set up in all administrative districts, and Provincial Labour Exchanges in all the provinces of the Empire. At first the placing of labour was entrusted to voluntary unpaid workers. The Provincial Exchanges were recommended to delegate their functions as far as possible to institutions already existing in the principal towns of each province for the placing of labour. At Vienna, as the result of the common action of the Government offices concerned, all the institutions of the sort were co-ordinated under a central office and placed under the Commission for Social Welfare (*Kommission für sozial Fürsorge*). The Labour Bureau of the Agricultural Society was affiliated to this central office. Thus the closest possible co-ordination was ensured between all these offices, the District Labour Exchanges and the Harvest Commissions. In order to facilitate the arrangements for the placing of labour, persons proceeding to distant centres were enabled to travel at reduced rates.

Comparatively little use was however made by agriculturists of these organizations, which were also intended for the supply of industrial labour. This was, on the one hand, in accordance with the traditions of agriculture where labour is always engaged personally and without intermediary, and, on the other hand, was the natural result of the utter impossibility of creating as it were by the stroke of a pen an organization of so comprehensive a nature.

According to the Austrian Statistical Year-book, there were in 1916 the following results:

Month.	Offers of employment for agricultural labourers or woodmen	Percentage (in relation to offers) of Applications	Engagements
January	5,091	66	40
February. . . .	4,723	63	37
March	5,064	76	38
April	6,702	52	56
May	4,717	65	35
June	6,092	54	46
July	7,126	46	53
August	7,147	75	50
September . . .	18,405	84	73
October	7,398	49	63
November . . .	4,480	82	52
December. . . .	4,249	56	54

A larger measure of success attended the administrative efforts in respect to the employment of refugees, disabled service-men and prisoners of war, of which we shall shortly have occasion to speak.

§ 3. AGRICULTURAL WORK OF SOLDIERS TEMPORARILY DETACHED.

It very soon became clear that no great benefit could accrue to agriculture from the mere provision of labour in the absence of those capable of directing it. In order to meet at least partially these pressing requirements and to give those responsible the opportunity of attending to the more urgent and important farm-business, farmers were granted from the spring of 1915 short periods of leave coinciding so far as possible with the seasons in which the farm-work most needed their oversight (spring cultivation leave, harvest leave, hay-making leave, etc.). Naturally the granting or not of this leave was decided by the military situation as it affected the commands or units to which the agriculturists were attached. Thus soldiers and even officers of the reserve belonging to units holding positions or bridge-heads not threatened by the enemy obtained leave in large number, and so also did workmen, drivers, etc., called up in accordance with the Military Service Law and rendering territorial service.

Those serving in the line seldom obtained leave. Those undergoing hospital treatment did not usually obtain leave, and harvest leave was granted to farmers and farm-labourers only if they were at the time physically fit for agricultural work — or in the case of farmers to supervise it — and always conditionally on there being no risk of endangering recovery of complete fitness for military service.

Efforts were made so to arrange the grants of leave that all soldiers had it in turn. Leave was granted first to farmers, in accordance with their special circumstances, and then to members of their families ordinarily engaged in agriculture, and lastly to agricultural labourers. Account was also taken, so far as possible, of local circumstances, in such as way that leave was first given to those coming from districts where the harvest was earlier and afterwards to those coming from districts where the crops ripened later.

Applications for leave could be made directly by soldiers to the military authorities or by their relatives through the medium of the political authorities. The granting of leave was done by the commandants of the division, in accordance with definite instructions. The period for which leave was granted to farmers was originally, as for other classes of soldiers, usually two weeks. Later on they were granted leave for a period of three or four weeks and from 1916 even five weeks. From March to April 1916, 898,969 men went on leave specially granted for agricultural work.

In some reserve centres and rest camps it happened that after leave had been granted to all who had a right to it, there still remained soldiers capable of doing agricultural work. At the request of the political authorities of the neighbouring centres, these men were detailed in gangs of about 20 to particular communes or to particular farmers (naturally with the provi-

sion of immediate return to their unit in the case of emergency). These gangs, always under the command of a non-commissioned officer, remained as might be required but for a maximum of two or three weeks on a farm, and received from the farmer in addition to board, a remuneration corresponding to the daily wage obtaining in the locality.

The labour depots near the military commands (reserves consisting of voluntary workers, territorials and refugees, intended to meet the labour requirements of the combatant army) could also furnish supplies of labour for agriculture. From March to August 1916, 161,015 men in all from these depots were put at the disposal of the communes to render assistance in agricultural work.

Finally in individual cases meriting special consideration, on application being made to the political authority, temporary exemptions from military service were also granted to farmers and to individuals qualified to undertake agricultural work as employees or wage-earners.

Requests for exemption had to be made by the relatives. They had then to be confirmed by the communal offices, examined by the *Landwehrvidenzbeamte* of the district command, then checked by the police, approved by the head of the district command and presented to the State Mobilization Department. From this the application was passed through the medium of the Ministry of Agriculture to the Ministry of War, and finally after approval, which was usually given in cases meriting special consideration, to the army corps. Exemptions could not be granted to those at the front, nor to those for any reason indispensable. The period of exemption was fixed by the Ministry of War. Requests for extensions of exemption were generally agreed to. Police supervision was exercised in respect to the work done by the exempted persons as by those simply on leave, and those who did not work were immediately recalled. In the granting of these exemptions special regard was had for skilled labour of an indispensable kind, such as attendants or mechanics in charge of agricultural machinery, especially threshing machines, steam-ploughs, etc., drivers of motor-ploughs, and in certain cases smiths and cartwrights. The length of the exemptions was proportionate to the local needs.

Where it was not possible to release the responsible farmer or manager of a farm, such farm was given precedence in the assignment of other supplies of labour.

§ 4. THE UTILIZATION OF THE WORK OF WOUNDED MEN IN AGRICULTURE.

Of special importance to the agricultural labour supply were the measures taken by the Government for restoring to their original occupations, under the most favourable conditions possible, wounded and disabled men. Efforts to bring this about were regarded as among the most important and urgent tasks of the rehabilitation and had the more significance for agriculture from the fact that it had been the occupation of the majority of the disabled men; a natural consequence of the high percentage of enlist-

ments among agriculturists and of the heavy losses of the infantry, in which most of the farming class were enrolled.

The guiding principles of the treatment of the disabled were first laid down by the Decree of the Ministry of the Interior of 15 February 1915, Z. 3,501, then in the Order of 29 August 1915 (*Reichsgesetzblatt*, No. 266), relating to the after treatment and practical instruction of the sick and wounded (1).

As a preliminary step, by the decrees of the Ministry of the Interior of 23 February 1915, Z. 411, and 27 June 1915, Z. 12,641, there were instituted "Provincial Committees for the Assistance of Discharged Soldiers" (*Landeskommissionen zur Fürsorge der heimkehrenden Krieger*) with a sphere of work falling under three divisions: (a) special treatment of the disabled, (b) provision for needs and instruction; (c) finding of employment.

(a) As far back as 1914 the systematic treatment of the disabled engaged serious attention and was in particular the subject of profound professional interest. On the proposal of Dr. Spitzzy, whose reputation in the matter of such treatment stood high, the military administration even in November 1914 conceived the idea of founding a large orthopaedic hospital specially designed for the purpose and workshops in connection with it. On 20 January a hospital was opened at Vienna with 1,000 beds, and in a very short time its capacity was so increased as to provide accommodation for 3,600 men. Other hospitals in the principal towns of the provinces were successively established. In these (2) the disabled were subjected to a systematic orthopaedic after-treatment with the aim of regaining the full use of their limbs; orthopaedic apparatus was prepared, artificial limbs were tested and given out, and operations were undertaken in cases where the wounds had been wrongly treated and a prejudicial condition had arisen which it was thought possible to remove. Special account was naturally taken of the bearing of all this on agriculture. Thus a special belt for farm workers (*Bauerngürtel*) was invented and turned out in large numbers at one of the special workshops for the manufacture of artificial limbs. Later on were devised the farmers' arm (*Bauernarm*) and the so called "*Kellerhand*".

The mechanical aids supplied to agriculturists were always very strong so that they would be of real use to them, and would be serviceable in all circumstances, places and positions. They were never given artificial limbs of complicated and delicate construction, unsuitable for the requirements of farm work.

(b) The medical treatment of the disabled was closely associated with their re-education. This in the first stages of the cure consisted only in making slight movements of the affected part (the lines of this re-education

(1) See *MILITARVERSORGUNG UND INVALIDENFÜRSORGE FÜR MANNESCHAFTSPERSONEN*, reprinted from *Blättern für das Armenwesen der Stadt Wien*, Vienna, 1915, and *Mitteilungen des k.k. Ministeriums des Innern über Fürsorge für Kriegsbeschädigte*, published July 1915 by the Government Printing Office.

(2) See SPITZKY: *Unsere Kriegsinvaliden. Einrichtungen zur Heilung und Fürsorge*. Vienna, 1915.

tion are embodied in the Decree of the Ministry of the Interior of 15 June 1915, Z. 9,389). Continued activity of this kind led on to more effective movements.

At a more advanced stage of the cure, the disabled men belonging to the agricultural classes were given once more the opportunity of handling agricultural implements (1). A philanthropic large landowner, Baron Drasche, made available for re-education in farm work a part of his estate, Ebreichsdorf, near Vienna: work was done there by disabled men for four hours each day while for the remainder of the day they rested or underwent treatment. In return for their services, they received prizes in money.

Those who had lost one arm at once obtained instruction in writing with the left hand (2).

Endeavours were always made to restore the disabled to their own occupation.

It was sometimes possible to compensate for the loss of certain physical powers by improving the education. Persons of sufficient intelligence and possessing a certain groundwork of knowledge were thus sent to agricultural schools, many such schools being established for that very purpose (3).

As a rule only a few disabled were admitted at one time to the courses at these schools, so as to give opportunity for individual and intensive instruction, adapted to the special requirements of the students. Among other courses were the following which were repeated at intervals: in Vienna, a course for disabled officers at the Agricultural College and a course in bee-keeping; at Edelfhof, a six weeks' course in agriculture; at Retz, a course of horticulture and viticulture lasting five months; at Mistelbach, Feldsberg and Krems, similar courses lasting six months; at Oberhollabrunn and Obersiebenbrunn, courses in general farm-work lasting five months; at Oberhollabrunn, a two months' course in dairying; at Tulln, courses in agriculture and forestry lasting six months; at Phyrn, a three months course in alpine agriculture; at Waidhofen and Hollenstein, courses in forestry; at Traismauer, five month courses in pisciculture; at Komenburg, one month courses in growing of forage crops and in stock-breeding, and at Mödling three month courses in fruit and vegetable growing.

In the Tyrol courses were held at Rotholz and at Platten on the Adige. In Bohemia courses were held at 17 German and 22 Czech schools, among these being courses of special instruction in land-improvement, in flax and hop cultivation, in treatment of meadow land, in milling and distilling, etc. Courses were also held in Moravia and Galicia.

(1) See MAIER BODE: *Der Arm und Beinbeschädigte in der Landwirtschaft*. Leipzig, 1917.

(2) See STIEGFR: *Einarmsige in der Landwirtschaft*. *Mitteilungen der Deutschen Landwirtschaftsgesellschaft*, No. 1, May 1915. — KUNDSBERG: *Einarmsigebel, ein Lehr- Lese- und Bilderbuch für Einarmsige*. July 1915.

(3) See: *LANDWIRTSCHAFTLICHES UNTERRICHTSWESEN UND INVALIDENFÜRSORGE VOM LANDESAUSSCHUSS DES ERZHERZOGTUMS OESTERREICH UNTER DER ENNS*. Vienna, 1916. — *DIE FÜRSORGE DES N. Ö. LANDESAUSSCHUSSES FÜR DIE KRIEGSVERLETZTEN LANDWIRTSCHAFTLICHEN BERUFS*. Vienna, 1918. — MARSCHNER: *Fürsorge für Kriegsbeschädigte in Böhmen*. Prague, 1916.

Of the greatest importance to the farmers were the courses for instruction and training of men in the use of agricultural machines. Thus at the State School of Industry at Prague a course was held in the training of drivers of motor-ploughs; at Clayton and Shuttleworth's factory in Vienna one for the training of mechanics in the use of the most modern and complicated agricultural machinery. As opportunity offered, disabled men received instruction at these courses who for some reason or other were no longer fit to carry on their former occupation, and who were anxious for agricultural employment. For these men the way was made easy to remunerative occupation, but naturally only when there was ample guarantee of their being physically fit for the occupation and when there was reason to suppose that they would be able to find a suitable position (1).

Many cases occurred in which it was not possible for disabled men who had formerly been engaged in agriculture to return to it. Such men were as far as possible given a training in kindred occupations in one of the workshop schools for the disabled where 31 trades were taught.

(c) With a view to establishing the most complete system possible of finding employment for those disabled men who were unable to return to their original occupations, an official organization was created by Decrees of the Ministry of the Interior dated 15 May 1915, Z. 22,924, and 28 June 1915, Z. 33,547. This conformed to the general plan of Government Labour Exchange offices, but differed in that it undertook the special task of finding suitable openings for disabled men. It aimed at preventing soldiers who returned to civil life with diminished earning capacity from being reduced to ask for charity — an aim in which it had the support of the various aid societies. Every effort was made to pass them as quickly and as effectively as possible into the different occupations. Under its auspices a periodical was published in Vienna, appearing once or twice monthly, entitled *Der Oesterreichische Arbeitsnachweis für Kriegsinvalide*. Branch organizations existed at the different provincial Labour Exchanges of the principal provincial towns and at the district Labour Exchanges. During the period 12 June 1915 to 31 December 1917 the Vienna office notified 25,947 vacant situations and effected engagements in 6,69 cases.

By these many and various measures, the Government on the whole succeeded, partly even during the war, in restoring to agriculture the labour of many who, thanks to suitable mechanical aids, and to a fuller technical training, could in spite of their disabilities render services of equal value with their former ones. Without the trouble that had been taken in the matter, this labour would have been, at least in great measure, lost to agriculture.

In connection with the after-care of disabled men who had been formerly employed in agriculture, mention should also be made of the extensive plans for home colonization undertaken by the Government, with a

(1) DEUTSCH: Aertzliche Berufberatung Kriegsschädigter im Rahmen der Arbeitsvermittlung. Vienna, 1917.

view to a permanent and satisfactory regulation of the agricultural labour question. On the basis of detailed enquiries (1), the project was formed of establishing small homesteads (*Heimstätten*) for disabled service men and for the families of men who had fallen in the war. The colonists were to have a cottage and a piece of land annexed to it, and could acquire ownership by payments on exceedingly favourable terms. The farms were to remain under the advisory control of agricultural colleges and were to be managed in such a way that the owner could undertake work for a daily wage and so eke out the produce of the farm which would not suffice for his maintenance. The intention was at one and the same time to improve the social position of the disabled service men and in some measure at least to remedy the shortage of houses and of labour on the land (2). The economic crisis of the last years of the war and the issue of the war itself have however prevented the carrying into execution of any of these projects.

Among the measures intended to attract highly skilled labour even from the urban centres, there must be mentioned the preliminaries, which received cordial support from the Government for the organization of farm apprenticeship already earlier advocated by Mischler (3), the well known pioneer of Labour Exchanges. In this field the *Deutsche Landwirtschaftsgesellschaft für Oesterreich* did good service with the "apprentice centres" (*Lehrlingssstellen*) established under its auspices (4).

§ 5. PRISONERS' LABOUR.

Even before the war the labour of prisoners from the Austrian prisons had been made available for agricultural undertakings, under certain definite conditions.

As soon as the war broke out, the Government endeavoured to detail for agricultural labour a larger number of prisoners. With this in view two methods were adopted. On the one hand by the Order of 7 August 1914 (*Reichsgesetzblatt*, No. 207) it was enacted that with certain provisos, a shortening of the term of imprisonment might be permitted if the prisoners' labour was of urgent national importance, and if the re-

(1) See VOGEL: Die Agrarstatistischen Grundlagen einer Innenkolonisation und Erhöhung der landwirtschaftlichen Produktivität in Oesterreich nach dem Kriege, in *Statistische Monatsschrift*, 1917. Gutachten für Vorbereitung einer Wirtschaftsheimstättenorganisation.

(2) RAUCHBERG: Kriegerheimstätten. Vienna, 1916. — SPATZEL: Die Erziehung der landlichen Kriegerwaisen. Prague, 1917. — MARCHET: Die Versorgung der Kriegsinvaliden und ihrer Hinterbliebenen. Wandsdorf, 1915. — RIEDL: Kriegsinvalidentelektion. In: *Der Arbeitsnachweis*, 1918. — KASTNER: Die landwirtschaftlichen Schulen und die Invalidenfürsorge. In: *Land- und forstwirtschaftliche Unterrichtszeitung*. Vienna, 1913, Parts III and IV. — VOGEL: Innere Kolonisation und Landarbeiterfrage in Oesterreich nach dem Kriege. Berlin 1918.

(3) See *Der Arbeitsnachweis*, 1909 and 1912.

(4) PROGRAMM UND LEITSÄTZE DER LANDWIRTSCHAFTLICHEN LEHRLINGSSTELLEN IN WIEN. — GESSMANN; Zurück zur Scholle. Vienna, 1919.

remainder of the sentence still to be undergone was less than six weeks. On the other hand measures were also taken with a view to utilizing in a larger proportion for farm work prisoners who could not be so released. By Decree of the Ministry of Justice of 8 August 1914, Z. 26,889, the tribunals were requested to put through on every occasion when possible requests for prisoner's labour coming from agricultural districts, that is to say within the limits allowed by the number of prisoners and warders available. They were further authorized for the remainder of 1914 to agree to the formation, within their own jurisdiction, of small squads (from 10 to 15 men) who might spend the night away from the prison or penal institution. These powers were later extended for the following years. In consideration of the exceptional situation, the Ministry of Justice ruled that in cases meriting special consideration, prisoners' labour would be supplied in return for the mere reimbursement of the expenses incurred in the matter by the State.

Since there were frequently not enough warders for these labour squads, thus rendering their utilization in agriculture impossible, by the Decree of 19 August 1914, Z. 28,053, the tribunals were requested to detail for prison warder service men from the *Landsturm* and this was allowed in very urgent cases on the basis of an agreement between the Ministries concerned. By Decree of 31 March 1915, Z. 5,413, the powers of the tribunals in respect to prisoners' labour were extended: in particular greater regard was paid to the agricultural status of the prisoner, whether he had been a farmer or an ordinary labourer.

By Order of 16 June 1916 (*Reichsgesetzblatt*, No. 183) the penitentiaries were authorized to allow a shortening of the sentence in the case of prisoners serving a sentence of two years or less if their work was of national importance. By Decree of the Ministry of Justice of 28 April, Z. 13,915, the conditions for granting remission of sentences were rendered still less stringent. In particular they admitted of the possibility of remission in the case of those serving sentences of more than two years, subject however to an act of grace on the part of the Emperor. Of course this could only be given in the case of prisoners who were not likely to attempt to escape, and it was also made a condition that the prisoner was not undergoing a sentence longer than three years. Statistics are not available as to the number of persons who in accordance with these arrangements became available for agricultural work. But it cannot have been very large in proportion to the number of farms seeing that prisoners' labour could only be quite exceptionally utilized by individual farmers.

§ 6. EMPLOYMENT OF SCHOOLCHILDREN IN AGRICULTURAL WORK.

In Austria school boys and girls between the ages of 11 and 14, and even younger, are frequently employed in agricultural work. It was natural that during the war their work would be even more generally employed as a means of meeting the serious shortage of labour: this however could not come about except by a marked infraction of the law relating to the

regular instruction of all children between the ages of 6 and 14 years. To meet the wishes of the rural population the Ministry of Public worship and of Education requested all the provincial education authorities to allow the greatest possible latitude to requests for leave of absence from school and temporarily to recognize the employment of children in farm work as sufficient excuse for non-attendance at school, giving special consideration to families, members of which were on active military service.

In 1915 these instructions, which at first applied only to 1914, were again put into force and amplified. In purely rural districts, instruction could be much curtailed particularly in the upper classes, and the school year could be closed in advance of the proper date for doing so. The principle was laid down that the interests of the school instruction must give way to those of the cultivation of the land. Authority to excuse from school attendance children required for farm work, at first only granted in regard to schools of the distinctly rural type, was extended to elementary schools in cities and market-towns, and then to the high schools. Similar instructions were issued to the managing bodies of the intermediate schools. Recommendations were also issued to these latter, to make special allowance in examinations of all kinds for this employment of the scholars in farm work. A Decree of the Ministry of Public Worship and of Education of 10 March 1916, Z. 6,158, granted fresh facilities.

The scholars in nearly all cases worked on their parents' farms, or on those of near relatives, rarely on those of strangers. It came however to this last for them in the latter years of the war, chiefly so as to obtain food, which was agreed on as payment in lieu of money and was much more acceptable in consequence of the prevailing scarcity of everything.

Bands of juvenile workers were also formed, chiefly in the earlier years of the war, by local education authorities, and put at the disposal of communes for agricultural purposes, the scholars being distributed as the work required.

§ 7. THE SHARE TAKEN IN AGRICULTURAL WORK BY REFUGEES.

Military events frequently necessitated the evacuation of Austrian territory. By the Imperial Order of August 1914 (*Reichsgesetzblatt*, No. 213), arrangements were made for the care of persons who in such circumstances might be removed from their homes, and for the regular utilization of their labour, in so far as they were capable of engaging in productive work. In order to find employment for them use was made of the Labour Exchanges already mentioned, and by means of these organizations refugees fit for agricultural work were in the first place drafted, some to specially prepared barrack centres, some after being duly classified as to nationality and religion, into various communes at the State expense. Thence they were distributed among the different farms. In April 1915 about 600,000 refugees were being maintained by the State (1). All this admin-

(1) TÄTIGKEITSBERICHTE DER HILFSKOMITEES FÜR DIE FLÜCHTLINGE.

istration was rendered considerably more easy by the fact that the persons dealt with were chiefly agriculturists or trained to agricultural work. Among them were a number who had been in the habit for many years of going as seasonal labourers to one of the western provinces and so were comparatively familiar with the conditions of life in their new surroundings.

Among the institutions for supplying labour, the agricultural organizations were the most active and in this work they received the fullest possible support from the Government.

The *Landwirtschaftsgesellschaft* of Vienna should be especially mentioned. This society not only undertook the necessary quarantine measures but also made it its special business to replace in their former situations those labourers who had previously been in the service of an Austrian employer. The utilization of these seasonal labourers was effected on a considerable scale (1) but almost exclusively on the large estates where the employment of labourers speaking other languages had previously been not unusual.

But the number of refugees absorbed by the agriculture of western Austria diminished in the course of the war, on the one hand as a consequence of the constant raising of the age for military service, on the other hand from the fact of the re-occupation of Galicia. The refugees were gradually recalled to their own homes to repair the damage wrought by war in their own fields. This also practically put an end to the emigration of agricultural labour from Galicia, to the great benefit of agriculture. Thus in the season of 1915-16 only 26,000 passports were issued by the *Deutsche Feldarbeiterzentrale* to Austrian citizens as compared with 291,708 in the period 1910-11. The remainder, nine-tenths (not including persons liable for military service) were retained to play their part in the economic life of the country.

To meet certain inconveniences that arose, the employment of Galician labour was regulated in 1917. Those making application for such labour had to obtain authorization, make proper hiring agreements and submit them for inspection by the Government authorities, and to take strict quarantine measures in regard to transport.

The hiring agreements, in the interests of both parties, were to include:

(1) A wages scale, showing the rates of wages for men engaged in ploughing and cultivation, for reapers and for other labourers, for women, for youths not fully grown and for girls, differentiating also between the wages to be paid in the period preceding the harvest, during the harvest, and in the period following the harvest.

(2) The proportion of remuneration in kind: this could not be kept at the pre-war level owing to the shortage of many kinds of food, but it had to be sufficient in all cases.

(3) The declaration of the employer that he was prepared to take for every ten labourers, one person who was unable to work (child); this

(1) The *Landwirtschaftsgesellschaft* of Vienna and the *Landeszentrale für Arbeitsvermittlung* of Prague found employment for about 135,000 refugees; of these 60,000 came from the large concentration camp near Gmünd. *Der Arbeitsnachweis*, 1918, Part II.

on account of the unwillingness of the refugees to leave the children alone in the camps.

The distribution of the refugees in the commune was as a rule left to the local Labour Exchanges, to the Harvest Commissions, etc.

§ 8. DISTRIBUTION AND EMPLOYMENT OF PRISONERS OF WAR.

Somewhat different counsels prevailed at different periods of the hostilities as to the right mode of distributing and utilizing prisoners of war.

In the first instance, the Government arranged for their labour to be available only in those districts where there was no unemployment. At the beginning of the war owing to the stoppage of many industrial enterprises there was very marked want of employment for certain kinds of labour. In consequence the prisoners had to be put to work for which no special qualifications were required, such as construction of roads, railways and canals, re-afforestation, improvement of alpine pastures and the like and finally harvesting.

The conditions under which the Ministry of War placed prisoners at the disposal of employers were as follows :—

1. Prisoners of war could only be supplied in gangs of 200 men, with a view to facilitating proper guarding and the finding of suitable board and lodging. Further, in order to ensure the full utilization of this supply of labour, the minimum number of prisoners of war allotted to a centre might be reduced from 200 to 30 if: (a) the employer would himself provide for guarding them; (b) take the responsibility that they would be adequately guarded; (c) undertake any expenses arising out of the recapture of escaped prisoners.

2. For guarding prisoners of war there might be utilized, besides members of civilian corps armed and sworn and members of corps of veterans who were not fitted for other service, also sworn forest rangers and sworn watchmen of fields, woods and vineyards. When persons of this type were not available the so-called "*Bewachungsmänner*" were provided, who had to be sworn in before the political authorities.

3. Board was furnished in accordance with local usage at the cost of the employer. Similarly fuel for prisoners of war and their guards had to be provided free by the employer.

4. As regards work for private individuals, the employer of prisoners of war had to pay to the military administration six hellers per day per person, the payment being made to the military commandant at the place of internment. The employer was also expected to find the remuneration for the work done by the prisoners of war. Two scales were fixed: one of 20 hellers and one of 30 hellers. Further, except when the work was of a military kind, the employer had the option of giving extra pay or extra rations of food, if he thought fit, in return for overtime work, for example during harvesting of crops. When found convenient, for example during hay-making or the spring cultivation, a remuneration on a piece work basis was recommended.

5. If the prisoners of war could not be accommodated at neighbouring prisoners' camps they were to be lodged in guarded premises.

6. Occasional medical attendance was to be provided by the doctors of the commune or others belonging to the district at the expense of the employer: the same arrangement to hold for sanitary inspection of the prisoners.

7. The military commandant, that is to say the commandant of the camps of prisoners of war, was empowered to arrange for their movement in gangs of 30 to 200 men.

8. Applications for the supply of more than 200 prisoners were dealt with by the Ministry of War.

Towards the middle of 1915 about 80,000 prisoners of war were being employed in agricultural work. With the aim of making possible a general utilization of prisoners of war on the small farms also, where by this time they were often treated on the same footing as the labourers who had been called up, the regulations for the supply of prisoners of war gradually became considerably relaxed. To avoid any unfairness arising out of the system of direct applications, whereby one farmer might obtain a large number while another had none, the Agricultural Labour Exchanges undertook the business of distribution of the prisoners (Decree of 6 November 1916, Z. 5,790). For this work a special contribution was made by the employers to the exchanges to cover working expenses so far as possible.

The supreme direction of the distribution of the prisoners of war, equally with that of the gangs of soldiers detached for work and of army horses, was now placed in the hands of the Ministry of Agriculture, one of the higher officials acting as liaison officer between the Ministry and the Ministry of War. Applications for prisoners of war on the part of communes, estates, sugar factories, etc., were to be made direct to Agricultural Labour Exchanges.

The distribution was arranged in accordance with the need for labour, the work to be done, and the likelihood of the farmer himself being able to put in more or less time on the farm either with exemption or with leave.

The prisoners left the concentration camps as a rule in gangs and under the direction of a prisoner non-commissioned officer, who usually also acted as interpreter. Superintendence of the party was entrusted to an Austrian non-commissioned officer with a detachment as guard. Oversight of the prisoners distributed over a district was the business of an officer. This latter was also especially to exercise oversight as to the provisioning, which had to correspond as closely as possible with the food to which the prisoners were accustomed in their own country, as well as to the general treatment and lodging and finally as to the proper utilization of the labour. As a rule there were no complaints. The prisoners of war became an indispensable element in agriculture during the war; in fact along with the women and children of those called up it was they who kept the land in a proper state of cultivation.

Besides their employment in purely agricultural work, the prisoners of war were also turned to account on other works of public utility that

could be undertake at a low cost : for example by their assistance improvements of various kinds were carried out, alpine pasture improvements, embanking of rivers, etc. In the summer of 1915 the authorities in charge of such kinds of work were employing 4,800 prisoners of war in round figures.

* * *

In spite of all the efforts, whether of the State or of those who remained on the farms, it was impossible in the circumstances and with the means available to maintain agriculture at the pre-war level. Hence came about a series of measures calculated to relieve the shortage of labour in agriculture. This was partly brought about by definite efforts to procure draught-animals for field work, and also by placing labour-saving machinery at the disposal of farms. The army had in fact absorbed the majority not only of the men, but of the draught-animals. But subsequently the shortage of raw materials of nearly every kind rendered impossible the production and repair of machines and the want of fuel and of lubricants materially interfered with the use of those existing.

Thus the normal rotation of the crops was altered; the cultivation of products requiring intensive labour, especially that of sugar beet, was reduced, and more extensive cultivation was substituted. The area of potato cultivation for example fell from 93,206 hectares in 1913 to 68,619 in 1918; the cultivation of the sugar beet from 17,957 to 8,452 hectares. The number of quintals produced per hectare fell respectively from 81.3 and 224.8 to 41.6 and 196.7 (1).

Notwithstanding the many provisions made and the efforts of all concerned the problem of the substitution of the agricultural workers called up could only be partially solved in Austria.

(1) ANBAUFLÄCHEN UND ERNTEERGEBNISSE IM GEBIETE DER REPUBLIK ÖSTERREICH IM JAHRE 1918. Vienna, 1919. — STATISTISCHES JAHRBUCH DES K. K. ÄCKERBAUMINISTERIUMS FÜR DAS JAHR 1913. Vienna, 1914.

GREAT BRITAIN AND IRELAND.

THE MAINTENANCE OF THE SUPPLY OF AGRICULTURAL
LABOUR IN ENGLAND AND WALES DURING THE WAR.*(Continued)*

§ 2. SOLDIER LABOUR.

A. General Arrangements for the Release of Soldiers for Work on the Land.

For the hay harvest of 1915 arrangements were made that furlough should be given to a limited number of soldiers (1). The furlough granted to each soldier was not to exceed fourteen days and was to last only for such time as he was actually required for haymaking. The employment of soldiers was subject to the condition that suitable labour could not be found in the locality. Every endeavour would be made to ensure that the men released had been accustomed to farm work, but no guarantee to this effect could be given.

Similar arrangements were made for the autumn cultivation in 1915 (2). In this case furlough was given up to a maximum of four weeks.

General arrangements for the employment of soldiers on farm work at any season of the year were made for the first time early in 1916 (3).

Under these arrangements furlough was given, at the discretion of the Military Authorities and as circumstances permitted, to a limited number of soldiers serving at home who had been accustomed to work on farms. The furlough granted to each soldier lasted only for such number of days, not exceeding four weeks, as he was actually required for the work.

Soldier labourers were not supplied unless it was impossible to obtain suitable labour in the locality. Applications from farmers who desired to employ soldier labour were made to the Board of Trade Labour Exchanges by whom they were transmitted to the Military Authorities. Farmers might apply for men for any class of farm work and when the nature of the work was specified in the form of application, Commanding Officers endeavoured to select suitable men so far as was possible. When a farmer applied for his son or one of his former labourers who was serving at home, efforts were made to release him.

(1) *Journal of the Board of Agriculture*, July 1915.

(2) *Journal of the Board of Agriculture*, October 1915.

(3) Notice to Farmers as to Soldier Labour, issued by the Board of Agriculture early in 1916 (*Journal of the Board of Agriculture*, February 1916).

A farmer living in the neighbourhood of a military station could apply direct to a Commanding Officer for military labour which he required at short notice and for a period not exceeding six working days. This arrangement was made to enable the farmer to take advantage of fine days or short intervals of fine weather suitable for his work.

The arrangements made at this time contemplated also the temporary employment of convalescent soldiers on agricultural work within easy reach of where they were stationed. For the purpose of such employment, convalescent soldiers were granted sick furlough, which was liable to be cancelled forthwith if at any time a man's health so improved that he was fit for discharge from the depot or hospital or if his health was suffering from the work.

Applications from farmers desiring to employ convalescent soldiers were usually made to the Board of Trade Labour Exchanges, but a farmer living in the neighbourhood of the man's military station who required a man at short notice, could apply direct to the Officer Commanding the depot or hospital. In making application, the farmer was required to state clearly the exact nature of the employment in order that the Military Authorities might be in a position to decide whether a soldier was capable of undertaking the work he would be called upon to do.

There was as yet no arrangement for releasing soldiers to work continuously on the land. The provision of soldiers for agricultural work was solely intended as a temporary expedient (1). Soldiers serving abroad could not be brought home, nor could men under training be allowed away, nor those required for necessary military duty, nor men who had recently been called up. It was to be understood that any soldier was liable to instant recall if required.

In July 1916, the Army Council gave their approval to arrangements under which squads of soldiers would be detached from their headquarters, supplied with tents and allowed to camp out in districts where their services were required for the harvest, but subject to recall to their headquarters at short notice (2).

For the harvest of 1916 the Army Council decided to release some 27,000 soldiers (3). The terms and conditions of employment were the same as those already in force.

New applications for soldiers had to be made through the local Labour Exchange and no application was entertained unless it had been received at the Labour Exchange before noon on Wednesday, 9 August 1916.

Applications already made, if they asked for soldiers to be sent on dates between 14 and 21 August inclusive were met as far as possible and no new application was necessary. In all other cases new applications had to be made.

(1) Notice on the Employment of Soldiers on Agricultural Work issued by the War Office (*Journal of the Board of Agriculture*, June 1916).

(2) Circular Letter, dated 7 July 1916, from the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, July 1916).

(3) *Journal of the Board of Agriculture*, August 1916.

The number of soldiers to be released represented only a small fraction of the number of men normally employed in the harvest, and many of the soldiers were unskilled in agriculture. It was also necessary, for military reasons, to retain in the Eastern counties a large proportion of the men released for harvest work.

For the spring cultivation of 1917 an arrangement was made between the War Office and the Board of Agriculture for placing a further supply of military labour at the service of farmers (1). In addition to the allotment of 15,000 men attached to home defence forces, whose labour would be made available to farmers under the arrangements hitherto in force, a further body of 15,000 men would be detached and quartered in different parts of the country.

The men would be quartered at infantry depots selected by General Headquarters. Each company would have an establishment of 250, with a due proportion of warrant officers and non-commissioned officers and would include men for clerical work to deal with applications from committees and farmers. A major, captain, and two subalterns would be appointed to each company.

The Board of Agriculture, in consultation with the War Agricultural Committees prepared a scheme for the distribution of this army of military labour between the various counties according to their requirements. Liberal allotments were made to the more important wheat-growing counties such as Norfolk.

A revised scheme for providing soldiers to assist in agricultural operations was drawn up about the same time (2). Some of the soldiers were to be provided from the Home Defence Force and others from the Army Class W Reserve.

The Home Defence Force men, 12,500 in number, were intended for the work of spring cultivation and would be subject to recall on 15 April. While the War Office could not guarantee that all these men would possess a knowledge of agriculture, they undertook to select, as far as possible, fit and able-bodied men with such knowledge. The demand for these men was to be ascertained by the War Agricultural Committee of each county, and the Board of Agriculture notified of the number likely to be required. Certain military depots were selected to be used as Distributing Centres and the War Office would move men to these depots as soon as the numbers needed were made known to them by the Board.

An arrangement had also been come to by which 4,000 able-bodied soldiers belonging to Infantry Works Battalions would be transferred to the Class W Reserve, and placed at the disposal of the Board of Agriculture in lieu of 4,000 combatant prisoners of war who had been allocated

(1) *Journal of the Board of Agriculture, February 1917.*

(2) Circular Letter, dated 2 March 1917, addressed by the Food Production Department of the Board of Agriculture to War Agricultural Committees (*Journal of the Board of Agriculture, April 1917*).

for agriculture in January 1917. These soldiers would, subject to unexpected military exigencies, remain in agriculture until the end of the war.

In addition to these 4,000 soldiers, at least another 6,000 men of lower medical categories, making 10,000 in all, would be provided from classes of enlisted men not reserved for Home Defence, and would also be available for farm labour until the end of the war, unless they were recalled for urgent military reasons. These men, until allotted to individual farmers, would be stationed at the selected military depots.

Any farmer who wished to employ men belonging to either of these two classes was to make application to the County War Agricultural Committee.

The War Office were of opinion that the most desirable method of reinforcing labour on farms was by means of a system of sending detachments of soldiers to selected localities, but they were prepared to consider applications for the release of individual men to return to particular farms, provided the circumstances were really exceptional (1).

The following were illustrations of what might be described as exceptional circumstances:—

(a) Where the soldier was the farmer himself and was required to manage the farm;

(b) Where a son, owing to his father's recent decease, had become the virtual tenant and was required to manage the farm; or

(c) Where the wife and family of the soldier were living in one of the farmer's cottages, and the soldier was of low medical category.

As regards men serving overseas, an even greater degree of urgency was required to be shown before there was any likelihood of their release being favourably considered.

In May 1917, at the request of the Board of Agriculture, the Military Authorities instructed Commanding Officers that skilled sheep-shearers not in Category A, for whose services application was made, were to be granted one month's agricultural furlough, if they could possibly be spared from their units (2). Applications were to be forwarded through County Agricultural Executive Committees.

Special arrangements were made by the Army Authorities to provide soldiers to assist with the hay and corn harvest of 1917 (3). The men were, however, to be available only until the end of the corn harvest.

The soldiers whom it was proposed to supply were to be sent to Military Distribution Centres. A farmer requiring the assistance of such

(1) Circular letter, dated 28 March 1917, addressed by the Director-General of Food Production to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, April 1917).

(2) Memorandum, dated 14 May 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, June 1917).

(3) Circular Letter, dated 19 June 1917, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, July 1917).

men was to apply to the Agricultural Executive Committee of his county by whom the application was to be passed to the Sub-Commissioner for the county of the National Service Department. It was this official who was responsible for seeing that the labour required was supplied.

In connection with the foregoing scheme for the supply of soldier labour for the hay and corn harvests, representations were made that in many districts the men would not be wholly employed on harvest work, inasmuch as a few weeks' interval would occur between the hay and corn harvests, during which time farmers engaging these soldiers would desire to employ them on general farm work (1). Authority was accordingly given so to employ them.

The military authorities agreed, a few weeks later, that no soldiers who were then engaged on agricultural work were to be withdrawn from the land until further notice (2). This instruction applied to all classes of soldiers who had been made available for agricultural work. The soldiers due to return to their units on 25 July were, therefore, to be allowed to remain on the farms where they were employed until the Executive Committees found it necessary to make use of their services elsewhere.

About the same time arrangements were made by which a large number of soldiers were to be made available for work on the land in connection with the programme for increased cultivation for the 1918 harvest (3). These men were to be made available gradually and were to be sent to Agricultural Distribution Centres (with which the existing Agricultural Depots would be incorporated) conveniently situated for each county.

The arrangements contemplated included a scheme for the supply of horses with soldier ploughmen, to which we shall have occasion to refer later, and the supply of unskilled labourers to farmers requiring such men for work in connection with the 1918 harvest.

Farmers who were entitled to the services of these men but were unable to commence operations before the harvest and were in need of additional men for harvest, were to be allowed to have the men forthwith at the rates of wages laid down for harvest work. These soldiers were to be allotted, subject to military exigencies, for permanent employment in connection with the 1918 programme, but as regards the men out on harvest work re-allocation amongst the various counties might be necessary after harvest.

In December 1917 a simplification was introduced into the method

(1) Circular Letter, dated 29 June 1917, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, July 1917).

(2) Memorandum, dated 10 July 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, July 1917).

(3) Circular Letter, dated 19 July 1917, and Memorandum, dated 23 July 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, August 1917).

of releasing for agriculture men of low category serving at home (1). It was arranged that the local representatives of the Food Production Department should bring to the notice of the Agricultural Commandants at Distribution Centres the names and addresses of such men whom they had asked to be made available for agriculture. The Commandants would forward the names direct to the headquarters of the Command in which the men were serving, indicating to which Agricultural Company the men should be posted if they could be made available. The ordinary procedure would then be followed as to transferring and posting the men as between Commands.

The arrangement did not apply to men in Category A nor to men serving abroad; applications in respect of such men were to be dealt with by the Food Production Department as previously. As regards men serving overseas, applications could only be considered respecting men in medical categories below A. Men in Category A and in the Mechanical Transport Section of the Army Service Corps were not available for transfer to agricultural companies.

In the same month a large number of unskilled soldiers was made available for agricultural work, and the Food Production Department asked the Agricultural Executive Committees to arrange for their employment at once on drainage work, ditching, etc., as much work of this kind was urgently required to be done in every county (2). The Executive Committees were informed that in any case in which they considered that compulsory orders should be made to carry out such work, they need not be deterred from making such orders by fear of lack of labour for the purpose as this source of labour could readily be drawn upon. If the number of soldiers required was not available at the Distribution Centre serving the county, immediate application was to be made to the Department, stating the additional number of men required, when arrangements would be made for their transfer from another centre.

A further provision whereby the number of soldiers at work on the land was slightly increased was an arrangement made at the end of 1917 between the War Office and the Food Production Department whereby in exceptional circumstances and on the recommendation of the Agricultural Executive Committee concerned, an extension of leave not exceeding one month would be granted to a man serving soldier who at the time of the application was on leave and whose services were urgently required on the particular farm (3).

(1) Memorandum, dated 11 December 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, December 1917).

(2) Memorandum, dated 19 December 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, January 1918).

(3) Memorandum, dated 28 December 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, January 1918).

There was now a fully developed system for the employment of soldiers on the land and the arrangements made in 1918 related for the most part to questions of detail.

Thus in June 1918, in view of the need for increased supervision over the work which the soldier labourers were called upon to perform, the Agricultural Executive Committees were asked by the Food Production Department to arrange for periodical inquiries to be made (1). This could be done either by a personal visit by an officer or member of the District Committee or by reference to the police as to whether the soldiers were employed at the place and on the work to which they were sent out. In this matter committees were urged to seek the co-operation of the Commandant of the Distribution Centre and in any cases where inquiry showed that the soldier should be withdrawn, to ask the Commandant to take the necessary action at once.

For harvest work in 1918 the Army Council decided to release several thousand soldiers on agricultural furlough (2). These men were to be distributed among the counties where labour assistance for the harvest was most needed. Application for soldier labourers for the harvest was to be made to the Agricultural Executive Committees, who would arrange with the Commandants of the Distribution Centres.

Amongst the soldiers who on this occasion were made available for agriculture was a small number of men from Command Depots (3). The employment of suitable convalescent soldiers on harvest work was also authorized on condition that they returned to hospital each night or once every three days for medical examination. Men belonging to the Royal Air Force were also encouraged to volunteer for harvest work in the neighbourhood of their camps when they could be spared from their ordinary duties.

In an Army Council Instruction issued by the War Office on 7 September 1918 it was stated that recent medical inspections had shown that there was a number of Category A men serving in Agricultural Companies and it had been decided to withdraw them after 15 September 1918 from military duty whenever they could be replaced by soldiers of a lower category (4). Exceptions were made in the cases of those employed in certain kinds of work.

Soldiers who were eligible would continue to be posted to agricultural companies, but those sent out for farm work on or after 1 August 1918 would be withdrawn after 15 September.

The arrangements for withdrawing the A men would be carried out

(1) Memorandum, dated 3 June 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, June 1918).

(2) *Journal of the Board of Agriculture*, August 1918.

(3) Memorandum, dated 5 July 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, July 1918).

(4) *Journal of the Board of Agriculture*, October 1918.

between the County Agricultural Executive Committees and the Commandants of Agricultural Distribution Centres.

As far as possible trained or partly-trained soldiers would be selected for withdrawal in priority to others, but due consideration would be given to the inconvenience which might be occasioned if certain men were taken away from their employment sooner than was absolutely necessary.

The Agricultural Executive Committee might decide that, in some cases, it was not necessary to replace a Category A man withdrawn from a farm, in which case they would be free to allot the lower category man, supplied as a substitute, to any other farm which was in need of labour.

If at any time there were no further A men on the strength of the companies at a centre, a report was to be made to the War Office, so that instructions might be issued for the disposal of the substitutes who would be sent there.

As A men could only be withdrawn as lower category men became available it was important that all experienced farm labourers serving in units at home in a lower category than A should be transferred to the Labour Corps and posted to Agricultural Companies. The only exceptions were B1 men who were fully-trained infantry men and men in technical corps more usefully employed at a trade from which they could not be relieved, and which would be of no value to agriculture.

The cessation of hostilities on 11 November 1918 could not, of course, be followed by immediate demobilization, but men of low medical category who were experienced farm workers and were serving at home were at once sent to Agricultural Companies and made available for agricultural work (1). This provision was extended by an Army Council Instruction issued in January 1919, which allowed any agriculturist serving at home, whatever his medical category, to be attached to an Agricultural Company, pending his demobilization (2). Over 12,000 men were sent out to their former employers on furlough under this procedure.

On the other hand, many of the soldiers employed on the land were not, in normal times, agricultural labourers and would on demobilization have been lost to agriculture. Consequently it was decided in May 1919 temporarily to retain for agriculture up to 20 per cent. of the soldiers employed on the land, in and attached to Agricultural Companies, in addition to the men whose application for demobilization as "pivotal" men had been sanctioned by the Ministry of Labour before 1 February 1919 (3). These men were to be selected by War Agricultural Committees in conjunction with Agricultural Commandants and would be nominated from those considered to be indispensable. All other soldiers employed in agriculture were to be withdrawn, a fortnight's notice being given to farmers before their withdrawal.

(1) Reply by the Under Secretary for War to a Question in the House of Commons, 19 November 1918 (*Journal of the Board of Agriculture*, December 1918).

(2) *Journal of the Board of Agriculture*, February 1919.

(3) *Journal of the Board of Agriculture*, May 1919.

Eventually, as the demobilization of agricultural workers proceeded, even this reduced supply of soldier labourers was withdrawn.

B. The Conditions of Employment.

Under the arrangements made for the release of soldiers for the hay harvest and for the autumn cultivation in 1915 and under those made early in 1916 for the employment of soldiers on farm work at any season of the year, each soldier labourer was to be paid 4s. a day if he provided his own board and lodging or 2s. 6d. a day if board and lodging were provided by the farmer (1).

These rates were to be inclusive of all allowances and were to be paid in respect of wet as well as of fine days. The hours worked were to be those customary in the district.

No charge was made to the farmer for the railway travelling expenses of the soldier labourers assigned to him, but he was expected to provide conveyance from and to the nearest railway station.

A convalescent soldier might either live away from the depot or hospital, or go to his work daily from his military quarters. The cost, if any, of moving the man to or from his work was borne by the farmer, except that no charge was made to the farmer for railway travelling expenses, if the man was employed for a week or more at a distance of 20 miles or over by rail, or if the man was away at least 3 days at a distance by rail of less than 20 miles.

If the convalescent soldier went away from his military station he was to be paid 3s. 6d. a day if he provided his own board and lodging and 2s. a day if board and lodging was provided by the farmer. One rest day in every seven days was to be allowed to him and in respect of that day he received Army pay.

In cases in which the convalescent soldier returned each day to his depot or hospital, he was to be paid at the rate of 3d. per hour, including hours for meals. At least one good meal was to be provided by the farmer, if the hours of work were such as to prevent the soldier returning to his unit for his midday meal.

The rates of pay for soldier labourers employed for the corn harvest of 1916 were fixed as follows (2):—

(a) In Cambridgeshire, Essex, Huntingdonshire, the Isle of Ely, Lincolnshire, the Soke of Peterborough, the East and West Ridings of Yorkshire and Rutland, 6s. a day for 10 working hours if the soldier provided his own board and lodging or 4s. 6d. if board and lodging were provided by the farmer, with 6d. an hour overtime.

(b) In the remaining counties of England and Wales, 5s. for a day of 10 working hours if the soldier provided his own board and lodging

(1) *Journal of the Board of Agriculture*, July and October 1915, and Notice indicated in note (3), page 234.

(2) Notice cited in note (1), page 235.

or 3s. 6d. if board and lodging were provided by the farmer, with 5d. an hour overtime.

These rates were to be inclusive of all allowances and were to be paid in respect of wet days as well as of fine days.

The soldier's army pay during the days on which he received civil pay from the farmer were regarded as included in the civil pay. He was credited with his Army pay for any Sunday included in the furlough, if he were not given civil pay on that day. He received no lodging allowance, rations, or ration allowance from Army funds, nor was he to be billeted. If separation or family allowance had been issued before the soldier's employment on farm work it continued to be issued during his absence.

Soldiers injured while in the farmers' employ had no claim to Army pension, but would be dealt with under the Workmen's Compensation Act, the farmer insuring as for the rest of his labour. They continued as soldiers for health insurance, and the farmer paid no contribution for this.

The farmer was at liberty to dismiss a man upon giving one day's notice or one day's wages in lieu thereof; the man's furlough was thereupon considered as cancelled and he returned at once to his unit.

Under the arrangements made for the release of soldiers for work in connection with the spring cultivation of 1917 the wages to be paid to the soldier labourers were to be at local rates as determined by the War Agricultural Committees (1).

Under the revised scheme for releasing soldiers for work on the land issued in March 1917, it was provided that, when the farmer boarded and lodged the men, he would pay the rate of wages current for agricultural labourers who lived in; otherwise, he would be required to pay the rate current for agricultural labourers who lived out (2). When the Officer Commanding Agricultural Company desired information as to what the current rate was or what were fair wages for overtime work, he was to refer to the War Agricultural Committee whose decision would be final.

With regard to the payment of men belonging to Agricultural Companies who were boarded and lodged by their employers some misunderstanding arose and in many cases the employers, instead of paying the "living-in" rate, were allowed to pay the "living-out" rate and to have the soldiers billeted on them under Army conditions. The effect of this was that the employer had paid less than the "living-in" rate. Commanding Officers were, therefore, instructed to take care that where men were provided with food and accommodation by their employers billeting money was not to be paid, but the full amount of the "living-in" rate was to be charged to the employers (3).

(1) *Journal of the Board of Agriculture*, February 1917.

(2) Circular Letter cited in note (1), page 236.

(3) Army Council Instruction, No. 525 of 1917. — Memorandum, dated 31 March 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, May 1917).

When the employer provided lodging, cooking facilities (including fuel) and light, but not food, he would be required to pay the "living-out" rate of wages for the men, but against this charge he would be credited with a sum equivalent to that which he would have received if the men had been formally billeted upon him under the Army Act, *i. e.* 9*d.* per day for the first soldier and 6*d.* for each additional soldier. The effect of this Regulation is shown by the following examples:

1. Assuming the "living-out" rate in the district was 25*s.* and the "living-in" rate 10*s.* per week, the farmer who boarded and lodged a soldier might have been previously permitted to deduct the billeting allowance of 19*s.* 3*d.* per week from the 25*s.* "living-out" rate, or in other words, he had secured the services of the soldier for 5*s.* 9*d.* per week, plus the cost of keeping him, whereas the "living-in" rate for the district was known to be 10*s.* per week. He would now have to pay the local "living-in" rate, *viz.*, 10*s.* per week.

2. Assuming the district rate of wages was 25*s.* and a farmer had hired two soldiers to whom he supplied lodging, cooking facilities (including fuel) and light, but no food,

	<i>s.</i>	<i>d.</i>
for the first man he might deduct 9 <i>d.</i> per day	5	3
for the second man he might deduct 6 <i>d.</i> per day	3	6
	8	9

so that the weekly sum due from him was 50*s.*, less 8*s.* 9*d.* = 41*s.* 3*d.*

In regard to the soldier labourers released in 1917 to assist with the hay and corn harvest, it was laid down that when the farmer boarded and lodged the men they were to be paid the rate of wage current in the district for harvest work for agricultural labourers who lived in, subject to the minimum rates mentioned below (4). Otherwise he was to pay the rate current for harvest work for agricultural labourers who lived out, subject to the minimum rates mentioned below. In the event of any dispute as to what the current rate was, whether for men living in or out, the decision of the County Agricultural Executive Committee was to be final.

For the hay harvest the minimum rates of wages would be as follows, but the local rate of wages was to be paid if it were in excess of these minimum rates:—

(a) 5*s.* 0*d.* for each week-day while the soldier was employed (and each Sunday on which he worked), if the soldier provided his own board and lodging. Overtime at the rate of 6*d.* per hour, after 10 working hours.

(b) 2*s.* 6*d.* for each week-day while the soldier was employed (and each Sunday on which he worked), if board and lodging were provided by the farmer. Overtime at the rate of 6*d.* per hour after 10 working hours.

(4) Circular Letter cited in note (2), page 237.

For the corn harvest the minimum rates were to be as follows, but the local rate of wage was to be paid if in excess of these minimum rates:—

(a) Cambridgeshire, Essex, Huntingdonshire, Isle of Ely, Lincolnshire, Soke of Peterborough, Suffolk, the East and West Ridings of Yorkshire and Rutland: 7s. 0d. per day of 10 working hours, if the soldier provided his own board and lodging, or 4s. 6d. if board and lodging was provided by the farmer, with 6d. per hour overtime.

(b) For the remaining counties of England and Wales: 6s. for a day of 10 working hours, if the soldier provided his own board and lodging, or 3s. 6d. if board and lodging were provided by the farmer, with 6d. an hour overtime.

When the men were not actually engaged in harvest work, the following minimum rates of wages would apply (1):—

(a) 4s. 2d. for each week-day while the soldier was employed (and each Sunday on which he worked), if the soldier provided his own board and lodging.

(b) 1s. 8d. for each week-day while the soldier was employed (and each Sunday on which he worked), if board and lodging were provided by the farmer.

The local rate of wages was however to be paid if in excess of the minimum rates.

The number of soldiers engaged on agricultural work made it necessary at the end of 1917 to modify the arrangement by which farmers had been at liberty to send soldiers back at a day's notice (2). This arrangement had originally been intended to apply to men only sent out for a short time, such as harvest time, and was likely to entail considerable congestion at Distribution Centres if farmers started sending men back whenever there was a spell of bad weather which interrupted outdoor work.

It was therefore decided that in the case of men who had been accepted by a farmer and retained more than six days, a fortnight's notice was to be given in writing to the Agricultural Commandant of the Distribution Centre from which the man was sent indicating when it was wished that the man should be withdrawn and the grounds for doing so. This was not to apply to men who were sent out for definite periods of under or up to one month.

Exceptional cases might arise which made it desirable to withdraw the man at short notice, and the Agricultural Commandants were, so far as possible, to accept such men if due notice were given.

In the same way a fortnight's notice was, if possible, to be given to a farmer before a man was withdrawn for military reasons.

In April 1918 it was laid down by the Army Council that thenceforth

(1) Circular Letter cited in note (1), page 238.

(2) Circular Letter, dated 21 December 1917, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, January 1918).

farmers would be required to provide board and lodging for soldiers employed in agriculture and to pay for their services at the local "living-in" rate, with a minimum of 10s. per week (1).

These conditions were amended in September 1918 in view of the decisions of the Agricultural Wages Board (2). It was decided that a minimum cash payment of 12s. 6d. per week was to be given and that overtime was to be paid for at the new rates.

C. The Supply and Training of Tractor Drivers and Steam Plough or Threshing Tackle Men.

It was found that many of the so-called skilled men who were being sent to Distribution Centres in 1917 had little or no previous experience of farm work, but that a considerable proportion of them possessed other experience which would enable them to be quickly trained for various branches of work connected with the new programme. The Food Production Department of the Board of Agriculture accordingly prepared schemes for the training of (a) tractor drivers, and (b) steam plough or threshing tackle men (3).

It was arranged that a careful examination of each man should be made on his arrival at the Distribution Centre, with a view to selecting those who by a short course of training could be made of value for some branch of farm work. As far as possible non-commissioned officers were to be selected for tractor or steam-plough work as with the higher wages paid for this class of work they would not lose by their transfer to agriculture.

The men most suitable for training for tractor work would, as a rule, be men of the Mechanical Transport Section of the Army Service Corps, or men engaged in the motoring or engineering trades previous to enlistment. From these and other suitable candidates about 12 men were to be selected for each county for training as tractor drivers.

The tractor representative of the Food Production Department was to be asked to prepare a list of the tractor drivers under his charge in the county who were sufficiently skilled to be capable of training other men in both driving and ploughing, and to submit the list to the Labour Branch of the Food Production Department. The Department would subsequently arrange for the tractor representative to take over the men selected, who were to be trained in both ploughing and tractor driving.

(1) Memorandum, dated 3 April 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, May 1918).

(2) Memorandum, dated 23 September 1918, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, October 1918).

(3) Memorandum, dated 17 September 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, October 1917).

Under normal conditions the course of training was not to extend beyond a fortnight.

The men most suitable for employment as steam plough and threshing tackle men would be those who had had previous experience in agricultural work, or who were intelligent, strong, active and willing to work long hours (if necessary), or any men who had been accustomed to agricultural engines, steam road rolling engines or hauling engines. In the first instance the men would receive a wage of 25s., which, if they made proper progress, would be increased at the end of the first month, and again when the man had become thoroughly proficient. For a commencement, the six most suitable men would be selected from among the soldiers sent to each Distribution Centre and the Department would arrange through the Steam Cultivation Development Association and threshing tackle owners, for the training of these men, so that all steam ploughing and threshing tackle might be kept fully manned.

In asking the owners of threshing tackle to undertake the training of soldier labourers, the Food Production Department informed them that it was prepared to approach the War Office for leave to be granted to skilled men then on military service who were not in Category A nor employed in the Mechanical Transport Section of the Army Service Corps (1). No guarantee could be given, however, that any men could be granted furlough, and owners of threshing tackle were urged to apply for men suitable to be trained, and to arrange to employ a gang of four or five soldiers to travel with each threshing machine from farm to farm in order to avoid the serious dislocation which otherwise occurred owing to so many farm hands being taken from their ordinary work on the arrival of the threshing machine.

By the end of 1917 the supply of tractors was largely increased, and it was decided to send a considerable number of soldiers from the Distribution Centres direct to tractor representatives to undergo their entire training on the land (2). It was expected that the training of these men would not take more than six weeks. Tractor representatives were asked to arrange to take immediately soldiers for training in this way with 50 per cent. of the tractors then in the county; this departure was not however to interfere with the training of such men as became available from the training schools.

A statement was sent by the Food Production Department to tractor representatives of the number of men whom the Department had instructed the Distribution Centres to place at their disposal. When these men had completed their training they were to be retained by the tractor representative as "third men" pending the arrival of further tractors.

(1) Circular Letter, dated 18 September 1917, addressed by the Food Production Department of the Board of Agriculture to owners of threshing tackle (*Journal of the Board of Agriculture*, October 1917).

(2) Circular Letter, dated 15 December 1917, addressed by the Food Production Department of the Board of Agriculture to tractor representatives (*Journal of the Board of Agriculture*, January 1918).

Soldiers trained entirely by tractor representatives were to be paid at the rate of 25s. a week for a month, without a proficiency bonus, but men from a training school were to be paid at this rate for two weeks only. At the end of either period the men, if proficient, were to be paid 30s. a week for the next two weeks without bonus and thereafter 30s. per week and a bonus of 1s. per acre ploughed, the bonus on other operations being based on 1s. for every pound sterling charged to the farmer. The payment of bonus was limited to 2s. an acre (or 2s. in the pound for operations other than ploughing) for any one tractor and plough. The division of this sum, if there were more than two persons employed, was to be determined by the tractor representative. Trained men instructing others were to be paid 10s. for each learner who was passed as efficient.

In the schools established for the training of soldiers as tractor drivers and ploughmen, 4,093 soldiers were trained. About 200 soldiers were also sent out for training with steam plough and threshing sets (1).

In August 1918, owing to the issue of revised regulations in regard to the pay of soldiers and owing to the fixing of local rates of wages by the Agricultural Wages Board, it became necessary to alter the rates of payment to soldiers engaged on tractor work (2).

For the future, in each county where the Agricultural Wages Board had fixed rates, all soldier labourers engaged on tractor work were to be paid the minimum rate fixed for the number of weekly hours specified by such Board. This entailed the abolition of the existing 30s. rate and 60 hours per week in these counties.

Overtime in excess of the hours specified by the Wages Board and Sunday work were to be paid for at the rate fixed by the Wages Board, and Sunday pay at the overtime rates, if no other rate had been fixed.

In addition a bonus not exceeding 8*d.* in the pound charged to the farmer in respect of any one tractor and implement might, at the discretion of the Agricultural Executive Committee, be paid to persons engaged on tractor work, *i. e.*, if the bonus were fixed at 3*d.* in the pound and the team consisted (a) of one person, the bonus payable would be 3*d.* in the pound, (b) of two persons, the total bonus payable would be 6*d.* in the pound, and (c) of three persons, the total bonus payable would not exceed 8*d.* in the pound.

In the unlikely event of the above rates (including bonus) falling short of the minimum for soldiers, namely 12s. 6*d.* per week, plus board and lodging, soldiers were to be paid such minimum.

If no Agricultural Wages Board rate had been fixed, the existing scale would obtain until such rate was fixed, namely 30s. per week without overtime for a 60 hours week, plus bonus of 1s. per acre ploughed, etc., and 6*d.* per hour for Sunday work up to a maximum of 5s. for any day.

(1) *Journal of the Board of Agriculture, December 1918.*

(2) Memorandum, dated 17 August 1918, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture, September 1918*).

Should it become necessary to dismiss labour owing to the shortage of work reference should first be made to the Department with a view to the surplus labour being transferred elsewhere. If this were not possible soldiers could then be returned to their Agricultural Companies.

Individual applications by soldiers for transfer to other counties in which they ordinarily resided would in future be arranged between the Committees of the counties concerned, but authority was to be obtained from the Officer Commanding the men's Agricultural Company before transfers were effected.

Soldier labourers were entitled to such leave as was laid down in Army Regulations. During leave they would receive Army pay from their Agricultural Companies and they would not therefore receive any payment from the Agricultural Executive Committee during such absence. Leave was only to be granted when, in the opinion of the Committee, the labour could be reasonably spared.

It was found in practice that the training of men did not interfere with the output of the tractor and the bonus of 10s. for each man passed as competent was cancelled.

Payment for soldier learners was to be the Agricultural Wages Board minimum rate without bonus until they were considered competent. If no such rates had been fixed they were to be paid 25s. a week for two weeks, 30s. a week for two weeks, and then when competent 30s. a week and acreage bonus. Soldier learners might also be paid subsistence and travelling allowances on the same terms as competent labour.

When, in accordance with the decision of the War Office in September 1918 men of Category A were withdrawn from Agricultural Companies, special exception was made in the cases of those who were employed as tractor-drivers, steam-plough drivers and threshing-engine drivers (1).

Immediately after the armistice it was announced that all threshing-machine drivers, irrespective of category, who were then serving with the Home Forces would be released immediately on agricultural furlough (2). This provision affected some 250 to 300 men, who were to be distributed from the Centres serving their counties of origin.

D. The Supply and Training of Horse Ploughmen.

Special arrangements were made at various times for the supply and training of horse ploughmen.

Thus, in March 1917, in view of the dearth not only of agricultural labour, but in some districts of horses suitable for farm work, the Army Council directed commanders of units in possession of draught horses or mules to arrange for the temporary loan of horses and drivers to farmers at the vicinity of their stations who might require such help (3). Payment

(1) *Journal of the Board of Agriculture*, October 1918.

(2) *Journal of the Board of Agriculture*, November 1918.

(3) *Journal of the Board of Agriculture*, March 1917.

would be required at the rate of 4s. per day for each horse for a working day of eight hours, farmers supplying without charge forage and where necessary stabling. Drivers were to be paid by the farmer at the rates already laid down by the Army Council.

The arrangements made in July 1917 (1) in connection with the programme for increased cultivation for the 1918 harvest included the supply of :—

(a) Horses with soldier ploughmen to be let out for fixed periods (according to scale) to farmers who were materially increasing their corn area for 1918, but were unable to carry out the work without this assistance ;

(b) Horses with soldier ploughmen working in gangs equipped with necessary implements who would deal with small areas (less than eight acres) of corn land which farmers could not undertake without such assistance ;

(c) A limited number of experienced men to farmers who had undertaken or would undertake to increase materially their acreage of corn land, but who could not do so without the help of experienced men, but had both horses and implements available for the purpose ;

(d) A limited number of experienced men to farmers who without such assistance would have farm horses idle entailing a less area of their arable land being cultivated for the 1918 harvest.

The details of the schemes for the supply of teams of horses do not here concern us, but it may be noted that a soldier or other ploughman was to be allotted to take charge of each team. When a team was lent to a farmer he was to find board and lodging for the ploughman and to pay him the local rate of wage for a skilled ploughman, deducting 16s. a week for his board and lodging.

Assistance to the smaller farmers was to be given by means of travelling gangs, consisting of a number of teams varying according to the amount of work to be done. Small gangs of three or four teams were to form a working unit and were to be placed in charge of a senior ploughman, who was to be paid 3s. a week more than the others. As far as possible a non-commissioned officer was to be selected as senior ploughman, if possessed of the necessary qualifications.

When in September 1917 schemes were prepared for the training of tractor drivers and steam plough or threshing tackle men, a scheme was prepared at the same time for the training of horse ploughmen (2). It was pointed out that amongst the soldiers sent to the Distribution Centres would be found many who had had long experience of horses in towns, but who lacked agricultural knowledge. These men, after being taught to plough, etc., could be entrusted with the working of a team of horses. In some cases skilled ploughmen in charge of Government horses could be selected to give the course of training, but it would also be open to the Agricultural Executive Committees to make arrangements with some

(1) Circular Letter cited in note (3), page 238.

(2) Memorandum cited in note (3), page 246.

of the best farmers who had ploughing work in progress to have men taught by their own ploughmen. Under normal conditions the period of training was not to extend beyond 14 days.

An alternative arrangement that had already been adopted by several Committees was to secure suitable land within easy reach of the Distribution Centre to be ploughed free of cost to the farmer. In this case one or two competent ploughmen would be required to act as instructors and the requisite number of horses could be obtained for the purpose by the Committee under the Horse Scheme already referred to (1), as well as ploughs, if these could not be borrowed.

Where a man was being trained with one of the gang-ploughmen, or by a ploughman employed directly by the Committee, the ploughman might be paid a bonus of 5s. for each man taught. When the training was given by a farmer, he might be allowed the free services of the men undergoing training for ordinary farm work when ploughing could not be done.

It was obviously an advantage to the unskilled man to be trained in order that he might subsequently secure a higher rate of wages and it was also advisable to offer some further monetary inducement to become proficient in the shortest possible time. The Food Production Department had therefore arranged that whilst any man was undergoing training in horse ploughing or tractor driving, and had to live away from his military depot, he should be paid only 21s. per week (living-out rate), but when he was able to show proficiency in the work he should be paid a bonus of 10s. and thereafter be secured employment at the full rate of wages.

Where soldiers were being trained in the vicinity of the Distribution Centre, returning to barracks each night and still remaining under military control, they would receive only their military pay during the period of training, but would be entitled to the 10s. bonus on passing the proficiency test.

The men were to be examined at the end of 14 days' training and if a man was sufficiently advanced to enable him to be employed forthwith in the particular branch of work for which he had been trained, the Agricultural Executive Committee was to grant him a certificate of proficiency. If it was considered that a further week's training was essential before the soldier could become proficient arrangements were to be made for this to be given. On the other hand, if it were thought that the man was not likely to prove satisfactory even with this additional training, he was to be returned to the Distribution Centre, no bonus being payable in these circumstances.

Schools for the training of horse ploughmen were quickly established in many counties and other counties sent out men to be trained by farmers (2). The former method was, however, considered the most satisfac-

(1) See above, page 250.

(2) Memorandum, dated 8 November 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, December 1917)

tory as at the training schools the men could be trained with the horses with which they would be sent out under the horse scheme, and a closer control could be kept over the subsequent movements of the men.

Apart from the soldiers trained as ploughmen on selected farms, about 4,000 men were taught to plough at the 30 training schools established in the neighbourhood of Distribution Centres (1).

When the War Office decided in September 1918 to withdraw men of Category A from Agricultural Companies the Food Production Department of the Board of Agriculture was able to arrange with them that soldier ploughmen who had recently been graded "A" should not be withdrawn from the farms, even though substitutes had already been provided by the Military Authorities (2). The War Office further agreed to make every effort to find an additional number of skilled ploughmen to assist in the autumn work. Ploughmen serving in the Army at home were to be sent out on two months' agricultural furlough, if they could be made available.

E. *The Number of Soldier Labourers Employed.*

It was not until 1916 that soldier labourers were employed in large numbers. Towards the end of August of that year it was stated in Parliament that under the new arrangement which had been advertized in the Press on 5 August (3) applications had been received up to midday on 9 August for 3,244 soldiers required to start work in the corn harvest (4). The number of men required for general purposes applied for under the previous arrangement, which still continued, was largely in excess of that number and was increasing from day to day (5). During the period 3 June to 28 July, 33,089 soldiers were applied for through the Labour Exchanges; these included many personal applications which could not possibly be granted, and 14,227 were supplied by the military authorities.

In the Spring of 1917, 18,000 Category "A" ploughmen were released on furlough for two months to assist with spring cultivation, and in the autumn of the same year, 1,500 ploughmen were given furlough for three months. For the harvest of 1917 leave was given to 17,000 soldiers (6).

In the first half of 1918 an inquiry was made into the wages and conditions of employment in agriculture and some of the investigators stated in their reports the number of soldiers employed at that time in

(1) *Journal of the Board of Agriculture*, December 1918.

(2) Notice issued by the Food Production Department of the Board of Agriculture on 16 October 1918 (*Journal of the Board of Agriculture*, November 1918).

(3) See above, page 235.

(4) Reply by the Parliamentary Secretary to the Board of Agriculture to a Question in the House of Commons, 21 August 1916 (*Journal of the Board of Agriculture*, September 1916).

(5) *Journal of the Board of Agriculture*, September 1916.

(6) *Journal of the Board of Agriculture*, December 1918.

different counties (1). Thus the number of soldiers employed in the East Riding of Yorkshire was reported to be 1,183; in the Lindsey Division of Lincolnshire, 1,049; in the Kesteven Division of Lincolnshire, 384; in Leicestershire, 1,149; in Rutland, 205; in Nottinghamshire, 843; in Derbyshire, 650; in Somersetshire, 1,580; in Cornwall, 977; in Gloucestershire, 1,170; in Worcestershire, 950; in Shropshire, 888; in Warwickshire, 1,156; in Staffordshire, about 1,000; in Cheshire, 1,350; in Lancashire, 1,541; in Cumberland, about 900; in the North Riding of Yorkshire, 941.

At the beginning of August 1918 the number of men in Agricultural Companies was about 70,000 (2) and shortly after the armistice it was stated in Parliament that there were over 79,000 men in Agricultural Companies and that 5,000 ploughmen who were in medical category A had just been sent out on two months' furlough (3). During the harvest 20,000 soldiers had been supplied, of whom about 3,000 were still engaged on potato lifting.

In December 1918 it was stated that apart from the men in Agricultural Companies there were 10,500 men temporarily engaged on seasonal work. There was one soldier employed on farm work to every nine civilian male workers (4).

In spite of the fact that the majority of men available had no previous experience of agriculture, the employment of soldiers proved a success. Under the training given to them by their employers the unskilled men quickly became useful farm hands (5). The Report on the Wages and Conditions of Employment of Agricultural Labourers stated that though unfavourable opinions had been expressed by individual farmers whose experiences had been unfortunate, there could be no doubt that the soldiers had as a whole afforded most valuable assistance to agriculture (6).

§ 3. PRISONERS OF WAR.

An important source of labour during the last two years of the War was found in the military prisoners of war. Arrangements were first made for their employment early in 1917 (7). A scheme was prepared by the Board of Agriculture, in conjunction with the Army Council, under which all suitable prisoners of war, both military and civilian, who had any experience of agricultural work were to be allotted to

(1) *WAGES AND CONDITIONS OF EMPLOYMENT IN AGRICULTURE. VOL. I: GENERAL REPORT VOL. II: REPORTS OF INVESTIGATORS.* London, 1919.

(2) *Journal of the Board of Agriculture*, August 1918.

(3) Reply by the Under Secretary for War to a Question in the House of Commons, 3 November 1918 (*Journal of the Board of Agriculture*, December 1918).

(4) *Journal of the Board of Agriculture*, December 1918.

(5) *Journal of the Board of Agriculture*, December 1918.

(6) Vol. I, page 48.

(7) Circular Letter, dated 16 January 1917, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, February 1917).

the Board of Agriculture, as well a number of civilian prisoners of suitable physique who did not possess any previous agricultural experience.

The number available for England were to be distributed for agricultural work in the several counties in such numbers as the Board of Agriculture considered desirable. In the first place the Board would place 75 prisoners at the disposal of each County War Agricultural Committee, and any prisoners beyond this number would also be furnished in batches of 75. This was done with a view to economizing military guards. Arrangements were to be made for housing the prisoners in depots from which they could be sent in small working parties, consisting as a rule of not less than five men. Prisoners thus employed would remain under military control, guards being provided both at the depot where they were housed and for each working party.

In selecting the district in which the prisoners allotted to any county could best be used, the Agricultural Committees were urged to bear in mind --

(a) The necessity of some suitable building being available for use as a depot, in a central position, and capable of accommodating the prisoners, and with other accommodation near by for housing the guard, about 35 in number.

(b) That the prisoners could be employed only within a radius of about three miles from the depot, except in cases where special facilities were provided by employers or by the Government for the transit of prisoners and their guards beyond that distance.

(c) That it was necessary that there should be sufficient work within the radius to keep at least 65 of the prisoners employed for a period of not less than two months.

Application for prisoners of war was to be made to the Secretary of the War Agricultural Committee for the County.

The prisoners were to be fed and boarded by the military authorities. Employers would not be required to provide any food for them.

The rates of pay for day or piece work were to be fixed by the Executive Committee of the War Agricultural Committee with due regard to the rates of wage current in the locality for ordinary agricultural labourers. Two scales of pay were to be prepared, one for men having a previous knowledge of agriculture, and the other for the men lacking such experience. The scale when prepared was to be submitted to the Board of Agriculture for consideration.

The prisoners were only to be employed during the hours of labour customary for agricultural labourers in the district and no work was to be performed by them on Sundays, except the milking or tending of live stock, or attention to produce grown under glass, and this only provided the prisoner were not engaged for more than two hours in all.

Employers were required to pay the sum due for the hire of prisoners of war to the officer, or other authorized person, at the depot on the Monday or Tuesday following the week of employment.

Employers were not to be liable to pay compensation under the Workmen's Compensation Act.

In addition to ordinary work of cultivation, prisoners might be employed in connection with the scouring or clearing of water-courses and ditches where neglect of such work was likely to prove detrimental to adjoining agricultural land, or other useful work which had a direct bearing on the increased production of food stuffs in the immediate future.

Owing to the very large demands which were made by Government departments for the employment of combatant prisoners of war on work of urgent national importance, it was not found possible immediately to allocate prisoners for agricultural work under this scheme. Permission was, however, accorded to employ in agriculture a few prisoners who had been allocated to various forms of work, but could not for the moment be employed thereon (1).

In June 1917, however, arrangements were made whereby a considerable number of military prisoners was rendered available for agricultural work or for carrying out drainage schemes which were likely to increase production for the 1918 harvest (2). In special cases the size of the batches of prisoners could be reduced to not less than 40 men and the guard was calculated at one third of the number of prisoners sent.

Early in 1918 the Government decided that a large number of German prisoners, selected as being skilled ploughmen, should be sent to England to assist in the ploughing and subsequent cultivation of the additional land to be cropped in time for the 1918 harvest and a scheme was prepared by the Food Production Department of the Board of Agriculture (3). Groups of from 30 to 40 men were to be sent to four or five selected places in each county to assist with ploughing and other tillage operations within a radius of about five miles from each centre.

The group of prisoners was to be housed in suitable depots selected by the Food Production Department, after consultation with the Agricultural Executive Committees, and approved by the War Office. As far as possible centres were to be formed near a market town and railway station. The premises for housing the prisoners were to be acquired and adapted by the War Office, who would be responsible for the control, feeding, etc., of the prisoners.

The prisoners were to be guarded whilst at the depot, but during the day they would be sent out without guards in gangs of four or five to work under the supervision of an English soldier ploughman or policeman ploughman (who would take part in the work and be known as

(1) *Journal of the Board of Agriculture, February 1917.*

(2) Circular Letter, dated 29 June 1917, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture, July 1917*).

(3) Notice issued by the Food Production Department of the Board of Agriculture, and Memoranda, dated 22 January 1918 and 28 January 1918, issued by the Food Production Department to County War Agricultural Executive Committees. War Office Letter, dated 17 January 1918 (*Journal of the Board of Agriculture, February 1918*).

"gang foreman") with teams of horses supplied by the Food Production Department, or singly to farmers in the locality who were short of ploughmen. The necessary farm implements were to be supplied by the Food Production Department and forage for the horses by the Army Service Corps.

While the Country Agricultural Executive Committee would be responsible for organizing the work to be undertaken by gang teams (making contracts with farmers, collecting dues, etc.) they were recommended to delegate the work to the District Committee in whose area the depot was situated, or, if more than one rural district was served from the centre, to allocate the teams between the District Committees interested, making each responsible for keeping the teams allotted fully employed.

In order to give more time to the Executive or District Committees to organize the work, it was arranged to supply only half the number of horses in the first instance. This gave an opportunity of testing the proficiency of all the prisoners as ploughmen and of arranging for the exchange of any proved to be unskilled, before the remainder of the horses were despatched.

For work within easy reach of the depot the horses were to be stabled near at hand, but for work on land situated further away teams were to be stabled as near as possible to their work, and a soldier would be billeted near by to take charge of them.

The prisoners required to man the teams in outlying districts were to be transferred to and from the depot each day in some suitable vehicle or when possible by train. Whilst away from the depot they were to be in charge of the gang foreman and to be supplied with suitable rations for their midday meal.

For each depot a non-commissioned officer, not above the rank of corporal, was to be employed to supervise the despatch of gangs each day in accordance with the instructions received from the District Committee. He was also to be charged with the keeping of weekly records of the work done by each gang and of the forage issued, and with the care of implements, was to report cases of sickness among the horses and to be generally responsible for the discipline of the gang foremen. Any slackness or misbehaviour of prisoners while out at work was to be reported to the non-commissioned officer in charge of prisoners of war.

For ploughing undertaken at piece-rates the farmers were to be charged according to the scale already fixed for team ploughing, and for subsequent tillage operations according to a scale to be drawn up by the Agricultural Executive Committee and approved by the Food Production Department.

A farmer in the vicinity of a depot who desired the services of one or two prisoner ploughmen for a few days to work teams which would otherwise be standing idle was to be supplied with such men provided convenient arrangements could be made for handing over the prisoners each day to the farmer and for their return to the depot before dark. In such cases the farmer was to be made responsible for the safe custody

of the prisoners during the day, and was to pay the Executive Committee for their labour at the rate of $5\frac{1}{2}d.$ per hour.

Prisoners for whom horses had not been supplied could be employed in gangs of four or five on ordinary agricultural work, such as hedging, ditching, etc., within a five-mile radius of the depot. The farmer employing them was to be charged at the current rates payable locally for ordinary civilian labour, with a minimum of $5d.$ per hour.

Farmers desiring to employ prisoner of war ploughmen or agricultural labourers as whole-time workers, boarding and lodging them on the farm, were allowed to do so subject to the approval of General Officer Commanding in Chief of the Command. Not more than three prisoners of war could be allotted to any one employer without special sanction.

Under this scheme the farmer was required to employ the prisoners of war for at least a fortnight. He was to be responsible for their safe custody and was to take due precaution to prevent them from being interfered with by the inhabitants. He was to house them in healthy, comfortable and warm premises and to supply straw to fill palliasses as well as the necessary cooking utensils, crockery, artificial light, facilities for washing, etc. Clothing and bedding would be supplied by the Government. Three meals were to be provided per day and in no case on a less generous scale than that of an ordinary civilian farm labourer. In case of medical assistance being required the employer was to call in the local practitioner and the fees would be paid to the doctor direct by the State.

For the men's services the employer was to pay to the Commandant of the prisoners of war camp from which they were drawn at the minimum rate of 25s. per week, subject to deductions of (a) 15s. per week in respect of board and lodging, and (b) such further sum as the Commandant might direct to be paid each week by the farmer to the prisoner of war. The rate of payment to the State for overtime work was to be assessed by the Commandant after consultation with the Agricultural Executive Committee and would not be less than the local overtime rate for civilian labour.

The normal rate of pay for a prisoner of war was to be $1d.$ per hour. For those who had shown proficiency and industry the Agricultural Executive Committee could recommend payment at the rate of $1\frac{1}{2}d.$ per hour. Non-commissioned officers who volunteered for such work were to be given $2d.$ per hour. For overtime prisoners were to be paid at the usual hourly rate of working pay. No extra remuneration could be given to prisoners of war by their employers.

For the hay and corn harvests of 1918 special arrangements were made for the employment of prisoners of war (1). All prisoners in agricultural camps and at least 50 per cent. of the prisoners employed on land reclamation work were to be made available for harvest work. After the requirements of the neighbourhood had been supplied, the surplus were to be sent out in migratory gangs.

(1) Notice issued by the Food Production Department of the Board of Agriculture' 19 June 1918 (*Journal of the Board of Agriculture*, July 1918).

Government Departments employing prisoners were also asked to release as many as possible for harvest work. Such prisoners were to be employed as far as possible in the neighbourhood of their working camps, but any surplus would be available for employment in migratory gangs. Other prisoners, sent directly from parent camps, were to be temporarily placed by the War Office at the disposal of the Agricultural Executive Committees for the formation of additional gangs.

Each migratory gang was to consist of ten prisoners and two guards. The Executive Committee was to decide where each gang was to be located for harvest work, but gangs were not to be worked within five miles of the coast without the express sanction of the Area Commandant, nor in the vicinity of an aerodrome, munition works or other important military or naval station. Nor could they be worked in a neighbourhood served by a schoolboy camp or women's agricultural camp.

The Executive Committee was to select and secure accommodation for each gang consisting of not more than 12 (10 prisoners and two guards) in a suitable lock-up building with a sufficient supply of good water at a fixed price of 3*d.* per head per night. Where such accommodation could not be secured a suitable site for the erection of one or two tents was to be obtained at a cost not exceeding 1*d.* per head per night. Where gangs greater than 12 were required the local Quartering Committee was to be consulted as to their housing. The military authorities would provide the necessary tents and stoves and the prisoners would be provided with palliasses, blankets, mess-tins and cooking utensils.

Each farmer employing prisoners was to be required to provide a suitable mid-day meal at his own expense. Tea, coffee, cocoa or milk might be given, but not intoxicants. Apart from this meal, rations for the prisoners and guard were to be supplied by the military authorities.

The following charges were fixed for prisoner labour :—

(a) Whilst employed on hay harvesting : 4*s.* 6*d.* per day of 10 hours (excluding meal times).

(b) Whilst employed on corn or potato harvesting : 5*s.* 6*d.* to 6*s.* 6*d.* per day of 10 hours (excluding meal times).

(c) Whilst employed on ordinary agricultural work owing to harvest work being stopped in the locality : The existing rate of pay for prisoners employed on agricultural work in the county, less one halfpenny per hour to meet part of the cost incurred by the farmer in providing the mid-day meal and refreshments.

(d) When employed overtime on haysel or corn harvest : 8*d.* per hour

These charges were to be paid to a representative of the Agricultural Executive Committee, who handed over the amounts to the Commandants of the prisoners of war camps concerned after deducting the sums paid for the accommodation of prisoners and guard, and 1*s.* in the pound on the full amount received for the prisoners' work. The latter deduction was intended to meet the costs to which the Committee would be put in connection with the scheme.

Some modifications were made in this scheme a month later (1). The War Office were not able to agree to the mid-day meal being provided by the farmer and it was arranged that rations to include the mid-day meal should be provided by the Military Authorities. The Food Production Department of the Board of Agriculture requested that the ordinary scale of rations laid down for prisoners should be increased for men employed for long hours daily on harvest work.

The following revised scale of charges was fixed for prisoners when employed on corn or potato harvest work: 7s. for a day of 10 hours, excluding meal-times, in the counties of Cambridge, Essex, Huntingdonshire, Isle of Ely, Lincolnshire, Norfolk, Soke of Peterborough, Suffolk, the East and West Ridings of Yorkshire and Rutland, and 6s. for a day of 10 hours in the remaining counties of England and Wales.

In October 1918 there were 330 depots in various parts of the country from which prisoners of war were sent out daily for agricultural work (2). Each of these depots contained 30 or more prisoners of war. Many prisoners at the depots claimed to be skilled threshing machine drivers and feeders. It was, therefore, possible that threshing sets could be worked wholly by prisoner labour within a three to five-mile radius of the depots. If in any particular depot the skilled men required were not available, men of the required type could be transferred from another depot where there was a surplus. In the event of owners of idle machines being unwilling to employ prisoners as drivers or feeders, the Food Production Department urged the Agricultural Executive Committees to consider whether the machine should be taken over and worked by prisoner labour under their control.

Provision was also made for the formation of migratory gangs for threshing work. At the conclusion of the corn harvest the prisoners of war belonging to non-agricultural camps were withdrawn, but arrangements were made to replace them by prisoners from parent camps, and the gangs were allowed to remain out for any urgent agricultural work such as threshing (3).

For the employment of prisoners of war in migratory gangs a slightly revised scheme was issued in December 1918 (4). Hostilities having ceased, British civilian labour was becoming available by reason of the closing of the munition factories, aerodromes, etc., and care required to be

(1) Memorandum, dated 17 July, 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, August 1918).

(2) Notice issued by the Food Production Department of the Board of Agriculture, 14 October 1918 (*Journal of the Board of Agriculture*, November 1918).

(3) Memorandum, dated 25 October 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, November 1918).

(4) Memorandum, dated 6 December 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, January 1919).

taken that prisoner labour should not interfere with the employment of British civilians who desired to take-up or return to farm work. Committees were accordingly urged to dispense with prisoners in any district where available civilian labour could be placed.

In the revision of the scheme which was made at this time, the principal modification was that payment for accommodation, fuel and lighting and any expenses incurred in the conveyance of the equipment and rations were to be made by the Agricultural Executive Committees, which could deduct these expenses from the moneys received in payment for the services of the prisoners before handing them over to the Commandants. In no case was more than 1*d.* per head per night to be paid for accommodation.

A further slight modification in the scheme was made in February 1919, when it was laid down that where the farmer was responsible for guarding the prisoners of war during the hours of work, the rate payable by the farmer for their services might be reduced by 4*d.* per day per prisoner and that a similar abatement might be allowed where prisoners of war were fetched over one mile by the farmer or by soldiers of agricultural companies in his employment (1).

The total number of prisoners of war employed on agricultural work in January 1919 was 30,679 (2). At the beginning of September 1919, when repatriation was decided upon, there were employed 19,319 prisoners going out daily to work from 321 agricultural camps, 1,735 prisoners boarded out with farmers, 1,008 prisoners sent out from parent camps, and 3,041 prisoners working in migratory gangs. The total number employed at that date was 25,103.

The general repatriation of prisoners was arranged to take place at the rate of 400 daily, but was seriously delayed by the railway strike. By December, however, all prisoners boarded out with farmers, or working in migratory gangs or from parent camps had been repatriated, as well as about 15,000 of the men working from the agricultural camps, of which over 200 had been closed. The remainder were repatriated as rapidly as circumstances permitted.

Though the Enquiry into Wages and Conditions of Employment in Agriculture revealed some difference of opinion amongst the farmers as to the value of prisoner labour, on the whole it appears to have given satisfaction. As was pointed out by the Investigator for Sussex, they were young, strong and efficient workers, many of whom had been accustomed to work on the land (3). The help given by the prisoners of war during the 1919 harvest went far to overcome the difficulties which arose through the withdrawal of the soldier labourers (4).

(1) Army Council Instruction, dated 25 February 1919 (*Journal of the Board of Agriculture*, March 1919).

(2) *Journal of the Board of Agriculture*, December 1919.

(3) *WAGES AND CONDITIONS OF EMPLOYMENT IN AGRICULTURE. VOL. I: GENERAL REPORT*, 50. VOL. II: *REPORTS OF INVESTIGATORS*, page 341.

(4) *Journal of the Board of Agriculture*, December 1919.

§ 4. INTERNED CIVILIANS.

A small number of interned civilians (or, as they were officially called 'civilian prisoners of war') were also employed on the land. A scheme for their employment was prepared by the Home Office as early as June 1916 (1). It was proposed to choose certain civilian prisoners of war from the internment camps, who had good records and were trustworthy men as far as was known, to release them on parole and to send them on suitable conditions to such employers of agricultural labour in non-prohibited areas as might apply for them. The men chosen would not be German; they would be subjects of Austria-Hungary or of Turkey. They would be able to speak at any rate a little English, or if there were men otherwise suitable who could not speak English, it might be possible to arrange to send a small group of three or four with an interpreter. It would be possible in many, if not in most, cases to send men already accustomed to farm work. Where they were not accustomed the men would at any rate be able-bodied and used to manual labour.

The employer was to lodge the prisoner on his premises, to feed him, and to pay him at the usual rate paid in the district to English agricultural labourers, deducting the cost of his board and lodging at the rate of 10s. a week.

On receipt of an application a selected man would be despatched as quickly as possible to the applicant's address, free of cost to the applicant. Should the man in any way misconduct himself, or should the employer have other reasonable ground for wishing to terminate the employment, he was to inform the police, who would take the man back to camp, also free of cost to the employer.

The conditions of payment were slightly modified before the end of the year, the employer being allowed to deduct from the wages paid the cost of the man's board and lodging at the rate of 12s. 3d. per week (2). They were further modified in July 1917, when the Home Office agreed that when a man was paid a wage of 25s. a week or over, the amount to be deducted in respect of the cost of board and lodging might be increased to 15s. a week (3).

The provision whereby civilian prisoners could not be employed in prohibited areas was modified in May 1917 to the extent that, although they could not be released for work in prohibited areas in counties on the East Coast, their employment in prohibited areas elsewhere would be con-

(1) Memorandum prepared by the Home Office and sent on 26 June 1916 by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, July 1916).

(2) Notice issued by the Board of Agriculture, 12 December 1916 (*Journal of the Board of Agriculture*, January 1917).

(3) Memorandum, dated 25 July 1917, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, August 1917).

sidered, provided certain special conditions were observed (1). At this time it was stated that there were over 500 civilian prisoners employed in agriculture.

The interned civilians gave every satisfaction to their employers. The farmers stated that the men were invariably willing and useful and gave no trouble whatever (2).

J. K. M.

(To be continued).

(1) *Journal of the Board of Agriculture*, May, 1917.

(2) Notice issued by the Board of Agriculture, 12 December 1916 (*Journal of the Board of Agriculture*, January 1917).

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PORTUGAL.

MEASURES RELATING TO AGRICULTURAL CO-OPERATION
DURING THE WAR AND THE FIRST YEARS AFTER IT.

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The aim of the present enquiry is the examination of the various measures that have been adopted in Portugal, during the European war and in the first years after the war, in respect to agricultural co-operation, with the object of encouraging the spirit of association in the rural classes and thus of rendering more intensive the national agricultural production.

Before proceeding to this enquiry it will not be out of place to say a few words about the origin and development of agricultural co-operation in Portugal and about all those forms of similar associations that are engaged in the task of increasing cultivation, among which the co-operative agricultural credit banks and the agricultural syndicates occupy the first place.

The first forms of co-operation in Portugal date back to very early times, and had as objective labour of one kind or another. Of these rudimentary co-operative societies there are still some examples in the provinces of Douro and Minho, consisting of associations of a limited number of persons who have at their disposal enough capital to make it possible for them to buy the necessary raw material for the manufacture of a certain product, and also to hire a small piece of land on which to carry on their industry. Once the goods are finished, they are divided between the members and the association is dissolved.

In addition to these early forms of co-operative societies, which are so in the full sense of the word, we find, on pushing our enquiry back into history, other organizations and associations, which though not co-operative in the strict sense of the term have nevertheless mutual aid in view in respect to the rural population and to agriculturists. The influence of these organizations on rural economy has been most valuable, as they have formed as it were a bridge between the primitive forms of co-operation and the more modern forms represented by the co-operative agricultural credit banks already mentioned.

The associations to which we have just referred are the *Misericórdias* and the *Celleiros*.

The *Misericórdias*, a royal foundation, date from 1498. Their aim was the succouring of the poor, the sick and prisoners. By a decree of 22 June 1778 the *Misericórdia* of Lisbon was empowered to grant loans to any person who should be prepared to undertake the clearing land. These powers were afterwards extended to all the *Misericórdias* of the Kingdom by the laws of 22 June 1866 and of 27 July 1877. They were

authorized to open actual credit banks which had power to grant loans, guaranteed either by a pledge, or by securities, or by a mortgage.

The *Celleiros*, founded some years later, were charitable institutions of the regular kind, established for the object of advancing the farmers a certain quantity of cereals, which was to be repaid at the end of the year with a fixed quantity more as interest. The decrees of 14 October 1852 and 30 July 1854 reorganized them and altered their constitution. They required the character of true agricultural *Monts-de-Piété* and transformed their loans in kind into loans in cash. Their operations were further extended by the decree of 30 September 1892 to the sale of fertilizers to farmers.

It was enacted by another law of 7 July 1898, that the administration of the *Celleiros* was to pass into the hands of societies devoting their capital to the benefit of agriculture. The same law authorized loans for periods of eleven months for purchase, sale and hire of agricultural implements.

The societies were also authorized to set up General Agricultural Warehouses.

The law of 1898 granted to municipalities and to parish councils, administering the *Celleiros Communs*, special privileges such as permanent exemption from duties of every kind, transport facilities, free analysis in the State laboratories of produce stored, etc.

Among the first forms of co-operative societies are the savings banks and credit banks, which might be real co-operative societies with limited or unlimited liability, a fixed or variable number of members and an initial capital built up by the share subscriptions of members. They took charge of the deposits of their members and of other persons, and paid a fixed interest on such deposits, and in their turn they granted loans but only to their members. On these loans they charged an interest a little above what they allowed on deposits. Usually there was no dividend for the members, for in the majority of cases the profits went to benevolent schemes and to building up reserves.

The first of these banks was founded in 1856 at Angra do Heroísmo in the Azores, and is still in existence, as is that of Aveiro, also an old foundation.

Among the other forms of associations, we will mention the co-operative vinegrowers' societies (*Caves sociaes*), established by decrees of 14 June and 27 September 1901, with the aim of improving the making of wine, and the Co-operative Union of Portuguese Vinegrowers, originating from the laws of 18 September, 1 October and 1 December 1908.

There has been no great development of any of these different forms of agricultural co-operation but they have given rise to two great systems of agricultural co-operation and association, represented by the co-operative agricultural credit banks and by the agricultural syndicates. The first are properly speaking co-operative societies operating exclusively in the sphere of agricultural credit. The second, though not constituted in co-operative form, are agricultural mutual aid associations, which

undertake extensive and valuable co-operative business, in conjunction with the banks, with which, as we shall see, they have a close connection.

We will now examine separately the organization of these institutions, as based on the laws that brought them into being, and as affected by the measures adopted by the Portuguese government during the war.

§ I. THE CO-OPERATIVE AGRICULTURAL CREDIT BANKS: THEIR ORGANIZATION AND THEIR WORKING.

The institutions of a co-operative type and the associations we have mentioned were obviously inadequate to meet the needs of agriculture and although measures were constantly passed for their better organization, it was generally realized that new organizations were needed, likely to promote extended cultivation and the employment of more modern methods of tilling the soil.

The law of 18 September 1908, article 49, was framed to meet these needs. It was there laid down that an agreement was to be made between the Government and the Bank of Portugal, with a view to the creation in the latter of a special department for agricultural credit operations. With this object, the law in question increased the total amount of notes in circulation, allowing the Bank to issue 385,000,000 instead of 360,000,000, it being understood that the additional amount was to be kept for agricultural credit operations.

This same law also fixed the rate of interest on the loans, as not to exceed five per cent., and it was also laid down that the period of the loans was not to be more than six months. This term could be renewed for a period of six or three months, when special circumstances called for such extension.

The power conferred by the articles of this law was exactly what was needed to bring the most competent persons in Portugal to the point of finding a speedy solution to the problem of agricultural credit, a problem which concerned the economy of the whole country. In fact after various proposals which for special reasons did not become formulated as law, the decree of 2 March 1911, drawn up by the Minister of *Fomento*, Senhor Brito Camacho, and MM. D. Luis de Castro, the younger Moreira, and Joao H. Ullich, was well received and passed. But many difficulties ensued when this decree, thoroughly modern in conception, was put into application. This was due to the distrust with which the rural classes regarded the innovations it introduced. Another decree, therefore, dated 30 June 1914, while not discarding the principles that informed the earlier decree, brought in new provisions, intended to facilitate the development of agricultural credit, through the medium of the banks of which we have already spoken.

The co-operative agricultural credit banks were founded by the decree of 2 March 1911, already mentioned, amended by the law No. 215 of 30 June 1914, in accordance with the suggestions made by the competent authorities to the Government in consequence of the results of the application of the first decree.

They are of the nature and character of co-operative societies with unlimited membership, and they can be constituted under any of the following forms :

1. Banks with liability limited to members' capital.
2. Banks with unlimited joint and several liability of all the members.
3. Banks with mixed liability limited for some of the members and unlimited for the other members.

Membership of these banks is open to :

1. Agriculturists genuinely working on land within the same administrative area as the bank and eligible for membership of an agricultural syndicate in operation in the same district.
2. The agricultural syndicates in operation in the locality of the headquarters of the bank.
3. All the agricultural associations whose sphere of action lies within that of the bank, eligible for membership of the local agricultural syndicate, and not receiving nor having the right to receive special subsidies from the State, and unable to apply more than 50 per cent. of their profits to their funds.

The objects of these banks are :

1. To lend members the capital they require, strictly for agricultural purposes ;
2. To receive as loans from the State, from members or from other persons, capital for employment in agricultural credit operations ;
3. To receive money on deposit, for withdrawal on notice or at sight, equally from members or from other persons, as against payment of interest at an agreed rate, not exceeding four per cent. per annum.

Capital. — In conformity with the two constituting laws, the capital of the co-operative agricultural credit banks is represented :

1. For the banks with unlimited liability, by the contributions and entrance fees paid by members, by profits accruing from loans made to members, by bequests, gifts, grants or subsidies, which they receive gratuitously.
2. For the banks with limited liability, by the society's capital as represented by the share certificates issued by the banks, by half the profits accruing from the loans made to members, by bequests, by gifts, by grants and subsidies, received gratuitously.
3. For the banks of a mixed type, the capital is made up of contributions and entrance fees paid by the members whose liability is unlimited, of the capital represented by the share certificates issued, half of the profits accruing from loans made to the members, and of bequests, gifts, grants or subsidies received gratuitously.

Whatever its form of constitution, no bank may ask for or accept capital of which the total exceeds the amount of the society's credit.

Credit Basis. — The basis of credit of the co-operative agricultural credit banks varies according to the form of constitution :

1. For banks with unlimited liability, the basis of the society's cre-

dit is the sum of the capital of the bank in question and half the value of the rural and urban property of the members, offered by them in accordance with the special rules laid down by the law ;

2. For co-operative agricultural credit banks with limited liability, the basis of the society's credit is double amount of its capital ;

3. For banks of a mixed type the basis of the society's credit is double the capital of the bank, the contribution and entrance fees paid by the members whose liability is unlimited, half the value of the rural and urban property belonging to the members with unlimited liability and offered by them in accordance with the provisions of the law ;

Loans to Members. — Sums lent by the banks to their members can only be applied as follows :

1. Purchase of seed, of plants, of insecticides, of fertilizers, of fodder, of implements, of carting requisites, of vaccines, serums and other materials required in the care of livestock ;

2. Payment of wages of farm hands, whether by the day or otherwise ;

3. Payment of dues, rent and other charges falling on agricultural undertakings, payment of duties and land-taxes on cultivated lands ;

4. Payment of mortgage debts, not exceeding 1000 \$ in amount, the interest on which is more than six per cent. encumbering rural property, and also the redemption of rents on land held in emphyteusis provided that, including the percentage payable to the head-landlord when the emphyteusis is sold and other dues, they do not exceed 400 \$.

5. Discounting of warrants issued on farm produce, stored in the General Agricultural Warehouses.

6. The carrying out of work that by increasing the value of the property makes the farming of it more profitable.

Loans to Associations. — Sums lent by banks to affiliated associations can only be applied as follows :

1. To production, manipulation, preservation, improvement and sale of agricultural produce, to the insurance of agricultural machinery, plant, produce, live-stock, or to the payment of losses incurred in cases when the associations are exclusively agricultural insurance societies ;

2. To the purchase, upkeep, use and improvement of plant for agricultural industries warehouses, work-shops and carting requirements ;

3. To the purchase of implements and machinery necessary for farming operations carried on collectively.

Duration of the Loans. — By the terms of the law No. 215, 1914, the duration of the loans is one year for loans made to agriculturists under heads 1, 2, 3, 5, and for those granted to associations under heads 1 and 3, renewable for another year when circumstances demand ; the period is fifteen years for loans made to agriculturists under heads 4 and 6, and for loans to associations under head 2.

Rate of Interest on the Loans. — The rate of interest on the loans made by the co-operative agricultural credit banks to their members cannot exceed five per cent. per annum. No interest is paid on loans for the payment

of mortgage debts, for the carrying out of operations calculated to increase the value of the property, or for the purchase, upkeep, and improvement of plant for agricultural industries, warehouses, etc. The interest and sinking fund, taken together, must not exceed six per cent. per annum, in the case of loans made for a period of 15 years.

State Funds for Agricultural Credit. — By the terms of the laws establishing agricultural credit, the Government puts at the disposal of this credit a Special Fund consisting of the credit opened by the Bank of Portugal for the Council of Agricultural Credit with the guarantee of the State, and up to a certain sum fixed by agreement with the Government. This sum must be divided among the banks and devoted exclusively to agricultural credit operations.

There is besides a Reserve Fund, created by the law No. 215 dated 30 June 1914, and modified, as we shall see later, by another decree.

This reserve fund is intended to cover losses that may have been incurred by the State over credit operations undertaken in pursuance of the law. The said fund is built up from the profits accruing from the operations carried out by the co-operative agricultural credit banks, with a deduction for the charges and commission by the provisions of the law due to the Bank of Portugal.

The co-operative agricultural credit banks are under liability to repay the State in full the capital sums lent to them. The guarantee as regards the State is the society's capital.

State Inspection and Control. — By the terms of the two laws of 1912 and 1914, a special commission called *Junta de Crédito agrícola* has the task of dividing the special agricultural credit funds among the banks, of supervizing the application of the grant, and of overlooking all agricultural credit institutions organized and regulated by the law. This commission is composed of a member of the Upper Council of Agriculture, a member of the Central Association of Portuguese Agriculture, a member of the Society of the Agricultural Sciences, a member of the Portuguese Society of Veterinary Medicine, and of three managers of co-operative agricultural credit banks.

Area of Operations of the Banks. — The co-operative agricultural credit banks have a local character and their sphere of action cannot go beyond the limits of the commune. However, the constituting law authorizes the federation of banks of several communes of the same district, the establishment of district banks and the federation of these latter, so as to form a central agricultural credit bank with a Lisbon office and working in close connection with the Central Association of Portuguese Agriculture.

§ 2. MEASURES TAKEN DURING THE WAR ON BEHALF OF THE CO-OPERATIVE AGRICULTURAL CREDIT BANKS.

After this brief description of the organization and working of the co-operative agricultural credit banks, and of the statutory regulations governing them in accordance with the pre-war legislation, we shall now

examine the measures adopted during the war and immediately after to meet the special needs of agriculture created by the exceptional emergency.

Measures in respect to State Funds for Agricultural Credit. — Experience had shown that the capital put at the disposal of the banks by the State was insufficient to meet the increased demands for money, on the part of the banks, for the loans they had to negotiate with the agriculturists, who found it imperative to resort to credit on account of the rise in the price of certain indispensable adjuncts to agriculture. Thus by the law of 30 June 1917, No. 719, the Special Fund for Agricultural Credit, which by the terms of the decree of 2 March 1911 came to 1,500,000\$, was raised to 2,000,000\$. This increase, however, was not enough to meet the credit demands of the banks, and so by another decree of 25 May 1918 this fund had to be raised to 5,000,000\$.

The regular working of the agricultural credit banks, and the punctual repayments made by the banks to the State, pointed to the reduction of the Reserve Fund, which, as we have said, had been created by the decree of 2 March 1911, at the rate of 200,000\$, and then kept at that level by the amending law No. 215 of 30 June 1914. As a matter of fact, during a period of more than eight years, and with a turn-over of 5,615,981.86\$, there had never been any loss affecting the State, either as regarded capital or interest.

This reduction was provided for by the decree No. 4,022 of 29 March 1918 fixing this fund at 20,000\$. Simultaneously with the reduction of the Reserve Fund and by the law we have just mentioned, a new fund was created called the Auxiliary Fund for Agricultural Credit, intended to be used in the same way and with the same objects as the Special Fund, except that preference was to be given to loans applied for by members and co-operative societies intending to carry out land improvement works.

The Auxiliary Fund is built up as follows: the interest paid from State capital by the co-operative agricultural banks on the loans made to them by the Directorate of Credit and Social Agricultural Institutions, this after first paying the incidental charges and the commission that is legally due to the Bank of Portugal: then the interest accruing on the capital forming the Reserve Fund lying at the Portuguese Savings Bank. In spite of the increase of the Special Fund and the institution of the Auxiliary Fund, the agricultural credit needs became more and more urgent, and the Government thought it advisable to create a third fund of a supplementary nature.

Provision for this was made by the law No. 6,925 of 30 September 1920, putting at the disposal of the Directorate of Credit a fund not exceeding 5,000,000\$, for making loans to the banks and at their request. This fund was placed on deposit in the Bank of Portugal and the Directorate can only make use of it when the Special Fund is depleted below 250,000\$.

The profits from the investment of the capital of this fund, after deducting the bank commission, are placed to the credit of the State.

Facilities and Additional Concessions made to the Co-operative Banks. —

One of the first measures passed by the Government for the benefit of the agricultural credit banks takes into account the event in which the banks cannot meet their payments to the State, because their members have not repaid their debts punctually, in which case the bank concerned should employ force in respect to the said members. It is understood that the bank is directly responsible to the State for the payment of the capital sums lent from the Agricultural Credit Fund, and that they are expected to make the payment whether or not they have had the money from the member who owes it.

In the face of this undeniable moral and legal obligation, for the fulfilment of which the society is liable, it is the duty of the management, in the event of a member not paying his debt when it falls due and in view of the joint liability of the members of the association, to proceed to the division of the total amount of the debt among the remaining members, so as to pay the sum due to the State or any other creditor, and after that to enforce full repayment on the defaulting member.

To avoid these consequences the decree already mentioned, No. 4,022, article 18, enacted that on the filing of the application of the bank concerned, addressed to the Council of Credit and of Social Agricultural Institutions, in the case when there might have to be forced recovery of the debt from the members, or even court intervention, the payment of the debt to the Government shall only take place after the ruling of the court has been put into execution, or after the lapse of a certain time to be fixed by the Council.

In making this concession, the State capital is not involved in any risk for by the terms of the law not only is the liability of the association and the members continued together with the securities and the privileges which the same law lays down in respect of debts to the State, but the solvency of the association is further secured, since the Directorate continues to exercise control, and, at any moment, subject to the moratorium agreed on by the Council, the recovery of the capital in question can be enforced.

This concession also covers the cases in which, owing to the death of the debtor, payment has to depend on the results of legal probate.

Another measure passed during the war deals with the augmenting of the funds advanced by the State to the banks.

The development of co-operative agricultural credit and the extensive loans granted during the war resulted in a depletion of the funds at the disposal of the banks for loans to agriculturists. Hence it became necessary for the State to make provision for advancing funds on a larger scale, so that the banks might be enabled to continue their valuable work for agriculture, of even more importance during the first years after the war. With this object, provision was made as follows by the decree already mentioned of 10 September 1920, No. 6,925:

1. That the concessions made to the co-operative agricultural banks with unlimited liability, whether from State funds or from

other funds placed for this purpose at the disposal of the Directorate of Credit and of Social Agricultural Institutions, should be limited to the capital of the bank concerned fixed as before, that capital however, being increased by the total value of the rural and urban property, not encumbered with mortgages, belonging to the members, instead of, as in previous measures by 50 per cent. of the value only: this value however not to be more than fifteen times the land tax on the said property after deducting the dues attaching to the emphyteusis, sub-emphyteusis, the quit rents, etc.

2. That the credit concessions to co-operative agricultural banks, organized on a mixed basis as to liability, when made by means of the above mentioned funds, may as before amount to double the capital of the bank, with the addition of the value of the rural and urban property not encumbered with mortgages, belonging to the members who have accepted unlimited liability.

Revised Provisions in regard to Loans to Agriculturists. — The exceptional conditions brought about in agriculture in consequence of the war decided the Government to allow loans to be granted for longer terms. Such provision was made by the decree No. 4,022, 29 March 1918 and by another decree No. 4,902, 11 October 1918. The term of one year allowed for loans by the constituting laws, was extended to two years, with the option of renewal for another year. The same provisions apply to the credit granted to the co-operative agricultural credit banks by the Directorate of Credit and of Social Agricultural Institutions. Another measure of importance deals with the increase of the sum that the bank can grant as a loan for the extinction of mortgage debts the interest of which exceeds six per cent. This sum, which could not exceed 1,000\$ by the terms of the law No. 215 (1912), may by the provisions of the decree No. 4,022 (29 March 1918) be as much as 3,000\$.

The rate of interest on loans to co-operative agricultural banks, the dates of repayment, renewals, repayment and recovery of debts, remain as before.

Security for Loans and Insurance of Goods Given in Pledge. — As we have already said, the guarantee required by the bank from members may consist of securities, a pledge, a mortgage, the deposit of securities, or the discount of warrants. It is to be remembered too that the law No. 215 required that no member should obtain from the co-operative bank in which he was enrolled, the loan of a sum exceeding 50 per cent. of the value of the personal security, the pledge, the mortgaged lands or the securities deposited, or exceeding 25 per cent. of property whether freehold or allodial belonging to him or to his sureties. These provisions have been further defined by another decree, No. 5,219, dated 8 January 1919. It was in fact laid down that no member could apply to the co-operative bank in which he was enrolled, on the guarantee of securities, for a loan of a sum exceeding the quarter of the value of property free of mortgage and belonging to him or to his sureties, the value of the property being fixed by the directing body of the bank in accordance with rules laid down by the law. As regards loans made

against the security of a pledge, no member can obtain a loan from the co-operative agricultural credit bank to which he belongs of more than 50 per cent. of the value of the pledge offered. The bank has power to fix the value of the movables and live stock serving as pledge.

As regards loans guaranteed by the deposit of securities or by a mortgage the new law re-enacts that no member can obtain from the co-operative agricultural credit bank in which he is enrolled more than 50 per cent. of the value of the securities deposited, or of the lands mortgaged, or of any such securities or lands as may have been offered on his behalf by a third party, in accordance with the provisions laid down.

Other modifications, introduced by the decree No. 1, 4,022 and the law No. 215 of 1914, deal with the compulsory insurance of the goods and of the valuables which serve as guarantee for loans.

The above mentioned law rigidly required that the insurance should come into force at the time the loan agreement was made, without taking into consideration the nature, the circumstances of these goods or the risks attaching to them.

In order to obviate the possible results of the strict application of this law, the Agricultural Credit Council as long ago as 1916 had explained to the Ministry of *Fomento* of that time the necessity for a modification, whereby the expense of insuring in such circumstances should not be out of proportion to the advantage derived from the insurance, according to the kind of damage likely to occur. A proposal was then made on these lines to Parliament, dated 27 April 1916: it had the unanimous support of the Commission of Agriculture, but although it was discussed on 1 February 1917 no vote was taken.

It was remarked in connection with this that the compulsory insurance usually involved useless expense and trouble, often putting obstacles and difficulties in the way of loans on pledge or on deposit of securities.

In fact, there was no insurance company that would undertake to insure against the more serious or more frequently occurring risks and accidents affecting crops and agricultural produce already warehoused. In consequence the agriculturist had to confine himself to effecting insurance against fire, the form of disaster which is least likely and, indeed, is hardly probable at all, considering the nature of the goods and the protection usually afforded them.

The most probable and most frequent losses, those resulting from plant parasites, theft, storms, etc. were not covered in any way. However the decree No. 4,022 of 29 March 1918 very properly enacted that insurance of the pledges and valuables guaranteeing agricultural credit loans is only compulsory in respect of risks to which the objects forming the pledge are liable and which are specifically undertaken by the insurance companies or mutual insurance societies.

The law does not do away with the character of the insurance, but establishes conditions by which insurance becomes an effective guarantee, not involving the borrower in useless expense.

Compulsory insurance, as established by the decree No. 4,022 and in the

circumstances explained, does not imply any obligation on the part of the borrower to insure at the time of the loan agreement, provided that the goods offered as security are not at the time incurring any risks considered as such by any insurance companies or mutual insurance societies.

If, however, they are at the time of the agreement already subject to insurable risks, or if they become subject to such risks while the agreement is in force, then such insurance as may be required by the nature, circumstances and actual condition of the pledges or valuables will be obligatory from the commencement of the loan, or from the date fixed by special clause of the contract.

Extension and Development of Co-operative Institutions. — Of special importance are the provisions in the decree mentioned, No. 4,022, of 29 March 1918, which, partially modifying as they do the law No. 215 of 1914, are intended to promote the establishment of true co-operative societies by means of the transformation of associations already in existence. The decree, in fact, empowers all agricultural associations already existing to take on the character of co-operative societies and of agricultural and stock-breeding insurance societies. To ensure this, the associations must not be limited in membership, and must aim not only at agricultural co-operation in labour, in the production, manipulation and disposal of the produce of their members, but also at the institution of mutual insurance for agriculture and stock-breeding.

The law, quoted above, lays down the general lines of working of the proposed co-operative societies, while modifying some of the provisions of the law No. 215, of 30 June 1914 and more closely defining others.

Once the co-operative agricultural credit banks were established in the mainland of Portugal it was soon felt that there was an equal need for them in the islands. It is true that articles 78 and 81 of the law of 1 March 1911 and of the law No. 215 of 30 June 1914 gave authority for extending to the adjacent islands the legislation in force as to co-operative agricultural credit, but this authority was not applied. On the representations of agriculturists there was published in 1917 the decree No. 3,474 of 22 October to the same effect but for various reasons it was not put into execution. The question was re-opened in 1918, and another decree with the force of a law was published, No. 4,124 of 8 April of that year, by which the legislation in force on co-operative agricultural credit was extended to the adjacent islands, with other provisions referring to the co-operative movement.

The decree No. 5,219, of 8 January 1919 consolidates all the legislation referring to co-operative agricultural credit, to agricultural and stock-breeding syndicates, as well as to their unions and federations, and two new decrees, those of 27 February 1919, No. 1,729, and 9 June 1919, No. 1,832, approve the registration and model statutes for such organizations.

Bodies Exercizing State Control and Inspection. — Finally we note that the legislation on co-operative agricultural credit, complex as it is, has made clear the necessity for a direction and an inspection more complete and more enlightened, and for a better organization of the public offices

in charge of this important service. To meet this need a Ministry of Agriculture was organized by the decree No. 1,249 of 8 May 1918 and the Council of Agricultural Credit, created by the decree-law of 1 March 1911, was done away with. All the duties and powers conferred on the latter passed by the provisions of the law No. 5,787 P of 10 May 1919 to the Directorate of Credit and of Social Agricultural Institutions, which now bears the name of the General Directorate.

By the terms of the legislation in force, therefore the General Directorate of Credit and of Social Agricultural Institutions has under its charge not only all the agricultural credit institutions of the mainlands and the adjacent islands, but also everything relating to the organization, the working and the oversight of syndicates whether agricultural or stock-breeding, co-operative mutual insurance societies for agriculture or stock-breeding, and their unions and federations, alike on the mainland and in the adjacent islands. It has also to undertake the oversight of agricultural societies engaged in administering State grants or those of local government bodies. The decree No. 4,523, of 30 May 1918, consolidates the measures relating to the functions of the Directorate of Credit and the Social Agricultural Institutions.

§ 3. OPERATIONS OF THE CO-OPERATIVE AGRICULTURAL CREDIT BANKS.

Following on the account of the legislative measures taken by the Government between 1915 and 1920 in regard to the co-operative agricultural credit banks we shall proceed to furnish some figures as to their working.

On 30 June 1920 there were on the mainland 93 co-operative agricultural credit banks and in the islands only one. They were distributed as to the years of their foundation as follows:

Years	Number of banks
1915.	48
1916.	13
1917.	21
1918.	7
1919.	1
1920.	4

As regards their form of constitution, 89 are societies with unlimited liability, three with limited liability and two with both kinds. In actual working order there are 60 banks with unlimited liability, but only one with limited liability. Up to 1920, no banks with liability of both kinds had begun operations.

We will now examine what has been the business done by these banks with the aid of the capital granted them by the State up to 30 July 1920.

The grants made by the State to the banks in the form of loans, from

the beginning of operations up to 1920, amounted to 5,615,981.86\$. With this sum the banks made 8,730 loans to agriculturists. Other loans to the number of 1,973 have been made by the banks from their own capital, to a total of 4,330,184.53\$. Thus the number of loans made by the banks to agriculture is 10,703 for a total of 9,946,166.39\$.

Out of the 8,730 loans made by the banks with the State funds, up to 30 June 1920, 6,779 amounting to 3,930,324.98\$ had been repaid. There remained therefore 1,951 loans amounting to 1,685,453.88\$ to be repaid in the financial year 1920-21.

Out of these loans, 8,566 were granted, for short terms and for long terms. They were secured as shown in Table, I, which also shows the security upon which loans were granted by the banks out of their own capital.

TABLE I. — *Loans made by the Banks with State Capital, and Loans made by the Banks with their own Capital up to 30 June 1920.*

Security		Loans made with State capital		Loans made with bank capital	
		Number of loans	Total \$	Number of loans	Total \$
Short term	personal security	4,494	3,082,629.66	1,492	3,936,012.68
	mortgage	1,274	546,624.96	105	64,349.00
	pledge	2,627	1,741,447.82	369	329,097.85
	securities	171	107,728.00	7	725.00
Long term		164	137,551.42	—	—
Totals . . .		8,730	5,615,981.86	1,973	4,330,184.52

The addition of the figures in Table I gives the total already stated, of 10,703 loans to the amount of 9,946,166.39\$. Loans for long terms appear, in relation to the total, in the ratio of 1.5 per cent., as regards number and in the ratio of 1.3 per cent. as regards amount.

In Table II (page 277) are shown the loans granted with State capital by the co-operative agricultural credit banks to the agricultural syndicates up to 30 June 1920.

These loans were made for the purpose of purchase of land for the offices of the association in question, for the purchase of warehouses, of fertilizers, of sulphate of copper, of sulphur, of seeds, of potatoes, of agricultural machinery or implements, for the payment of wages, for the purchase of meals and cattle food of various kinds, etc.

Application of Loans. — The loans granted by the banks have been widely applied to all branches of agriculture, in accordance with varying economic circumstances.

TABLE II. — *Loans made with State Capital. by the Agricultural Credit Banks to Agricultural Syndicates*

Years	Number	Amount
		\$
1915	32	64,593.18
1915-1916	41	93,529.25
1916-1917	68	244,287.09
1917-1918	62	187,162.44
1918-1920	35	251,148.97
1919-1920	42	310,986.40
Total	280	1,151,717.33

Table III (pages 278 and 279) shows the various applications of the loans. As may be seen from this table, the largest number of loans have been effected for the purchase of fertilizers and for buying live stock.

Taking the figures of each financial year into account the loans for the purchase of fertilizers increased up to 1917-18, and then diminished in the course of the two following years. Thus in the financial year 1917-18 there were 332 loans granted; in 1919-20 they only came to 110, that is to say than less one third of what they had been in the preceding year. Up to 1915-16, the purchase of live stock as a way of using borrowed capital holds the third place in the scale of numbers, the number of loans made for vine growing exceeding it, but in 1916-17 it takes the second place. In the course of the financial years 1917-18 and 1918-19 a fall in this number is noticeable, but during the financial year 1919-20, it only fell short by one of the highest number previously reached, that of 1916-17.

Vine growing takes the third place. There is an increase in the loans up to 1916-17, then a fall during the financial year 1917-18, to rise a little in 1918-19, then perceptibly dropping in 1919-20. Harvest expenses, which up to 1918-19 occupied the fifth place, rose to the fourth during the last financial year, on account of a sudden rise in wages at the beginning of harvest operations. This brought about a larger number of applications for capital on the part of growers of cereal crops and agriculturists. Loans for harvesting fell off in the course of 1916-17 and 1917-18, rising again in 1918-19 and remaining nearly the same in 1919-20.

The payment of wages to farm hands figures in the fifth place, but the number of loans of this kind is nearly equal to that of loans made for harvesting. It should, however, be noted that this number, having increased up to the financial year 1916-17, then diminished down to the

TABLE III. — *Purposes for which Short*

Years	Spraying materials	Cultivation and crops									
		Vines	Millet	Potatoes	Olive-trees	Rice	Sowing	Weeding	Harvesting	Threshing	Seeds Fertilizers
Up to 1915	157	347	35	73	67	—	86	113	316	181	170 55
From 1915 to 1916	110	216	19	13	36	3	94	112	141	77	43 21
» 1916 to 1917	159	231	34	36	45	2	139	81	117	101	67 36
» 1917 to 1918	175	137	24	42	58	2	96	53	115	91	57 32
» 1918 to 1919	113	152	17	22	30	—	82	61	186	171	34 26
» 1919 to 1920	168	121	12	5	22	3	79	21	187	199	49 11
Totals	822	1,204	141	191	258	10	576	446	1,062	820	420 17

last financial year. The loans granted in this year represent a minimum, being less than half the number reached in 1916-17.

The purchases of spraying materials after increasing up to 1917-18 show a considerable decrease in the last two financial years.

The loans granted for seeds and cereals beginning from 1917-18 have fallen off, so that they represent little more than half the highest number reached in 1916-17. Finally the loans granted for the purpose of breaking up fallow lands fell off in 1918-19 and rose again slightly in 1919-20.

Limit of Loans. — As to the variations of the loans as regards their amount, we note that during the last financial year the larger number of the loans are for sums varying from 100\$ up to 250\$: then come those of from 500.01\$ to 750\$. But if we take as the maximum limit the sum of 1000\$ we find that the loans not reaching that figure are 87.7 per cent. of the total. This shows that it is not the large proprietors that chiefly have recourse to the banks but the owners of small and medium-sized farms and all the class of farmers not included among the property owners.

Period of the Loans and Extensions. — As we have indicated, the period for repayment of loans was extended temporarily in the financial year 1918-19 in virtue of the law No. 4,902 of 11 October 1919. The period was extended to two years, and the privilege came to an end in 1920. In all the years the usual period was one year with an extension for a further year. The difficulties and accidents of agricultural life very often prevent repayments being made within the time fixed at first, such time having been calculated to allow of the coming in of receipts that should accrue from the agricultural operations in respect of which the application was

were made up to 30 June 1919.

Charges																							
Machinery	Live stock	Fodder	Spirits of wine	Cans, etc.	Breaking up of fallow	Plantations	Wages, etc.	Clearing land	Pig pastures	Oil mills and wine presses	Farm buildings	Rent	Land tax	Dues	Collective sales	Redemption of mort- gages	Boring for water	Miscellaneous	Payment of compensa- tion for live stock				
13	309	55	—	—	56	101	328	95	33	24	37	40	10	1	2	—	—	48	—				
6	209	12	—	1	87	15	167	13	19	1	17	12	41	2	—	4	—	133	—				
10	310	10	—	8	64	48	189	21	18	11	57	15	23	2	1	9	—	107	—				
6	267	15	—	—	70	42	179	9	11	5	58	16	11	1	—	2	2	14	—				
7	217	3	—	—	53	12	111	20	7	8	33	16	—	1	—	1	1	22	—				
8	309	5	6	1	62	51	83	17	6	3	36	16	—	2	—	2	—	16	1				
50	1,521	100	6	10	392	269	1,057	175	94	52	238	115	85	9	3	18	3	340	1				

made for capital. And as the law allows these extensions, there are a great many of them.

The percentage of extensions on the total number of loans in each financial year was as follows:

1915-16	58.7 per cent.
1916-17	53.3 " "
1917-18	73.9 " "
1918-19	97.5 " "
1919-20	67.6 " "

As we see, number of extensions noticeably increased in 1917-18 and continued to do so in 1918-19.

§ 4. AGRICULTURAL SYNDICATES.

As we have already remarked at the beginning of this article, in speaking of co-operation in Portugal and of the organizations promoting the development of agriculture a description must be given of the agricultural syndicates as being institutions which though not true co-operative societies have all their characteristic features, seeing that they promote every kind of mutual assistance among the agriculturists, with the aim of bringing about a more extended, a more scientific, and a more profitable cultivation of the soil.

The syndicates owe their institution to the laws of 5 and 7 July, 1894, and to that of 4 December of the same year, laying down their rules. Difficulties of various kinds, however, prevented their actually coming

into being, and it proved necessary to take steps to reform the constituting laws. This was effected by the law of 3 April 1896, which is to be looked upon as the law really constituting the syndicates, for up to that time they had not taken actual shape.

By the terms of this law, the Portuguese agricultural syndicates are, like all organizations of the kind, associations numbering both agriculturists and persons carrying on industries cognate to agriculture, and formed with the object of contributing to agricultural development or that of cognate industries whether by collective purchase of machines, implements, seeds, etc., or by offering credit facilities.

Apart from these fundamental and essential objects, there are other special aims which the syndicates may follow out, such as growing of new kinds of crops at experimental stations, trials of new agricultural machinery, opening up of new markets, etc.

The constituting law goes on to declare that the syndicates have power to set up within themselves co-operative agricultural banks, or to give facilities for their institution. Thus the syndicates have beyond question a most important place in the national economy, not only on account of the general functions that the law confers on them in relation to the development of agriculture, but also on account of the assistance they render along the same lines in conjunction with the co-operative banks.

Here it will be well to recall that this united action between the agricultural syndicates and the co-operative agricultural credit banks had the express sanction of a provision of the law. The fifth paragraph of article 12 of the law of 2 March 1911, and paragraph 5 of article 14 of the law No. 215 of 1914, lay it down in fact that no co-operative agricultural bank may be organized, unless there is a corresponding syndicate working alongside of it. This is a provision of especial importance from which it results that the syndicates are the organization underlying the credit operations carried out by the co-operative banks.

To this examination of the essential functions of the syndicates, we will add that by an explicit legal provision, they are forbidden to undertake industrial and commercial business on their own account, or to employ their capital in banking or other operations. These measures make quite clear the nature and character of these institutions, which are exactly those of agricultural mutual aid associations. The syndicates in fact have power to encourage and promote the establishment of mutual benefit societies, of co-operative associations, of mutual insurance societies, and of co-operative agricultural banks.

As regards their constitution and working, we may note that the agricultural syndicates have a capital built up from entrance fees, subscriptions, commissions paid by the members for operations carried out with the help of the syndicate, State subsidies, grants from administrative councils, gifts and bequests. To meet expenses incurred on behalf of their members when arranging sales, purchase, transport or any other business for them, they can charge a commission of two per cent. They are exempt from commercial taxation, from stamp and registration duties,

and have the right to use unstamped paper for all their documents and certificates, including the deeds by which their rules are drawn up or modified. They have as well rebates on railway transport and large discounts on their purchases of serums and vaccines.

The area of each agricultural syndicate is determined by the needs and the usages of the locality in which the office is situated, by the character of the existing communications, by the type of cultivation best suited to the district, etc. In the case of stockbreeding syndicates a centre must be included in the area suitable for improving the breeds and developing the stockbreeding industry.

In spite of the marked advantages offered by the law to these institutions, the first attempts at establishing credit institutions were failures, and the greater number preferred to engage in the purchase of fertilizers, and the chemical analysis of soils for their members. It was not till later on that the syndicates set up the first savings and credit banks, which we mentioned at the beginning of this article.

In 1908 there were already 33 syndicates of which a fair number were linked up with the *Caves Regionaes*. Some years after the Federation of Portuguese Agricultural Syndicates was formed, and the Central Association of Portuguese Agriculture became the central syndicate. We may recall the fact that the Portuguese Central Association formed in 1860 is the oldest association in Portugal. From its first institution it has rendered inestimable services to agriculture by improving the system of cultivation; by opening at its own expense laboratories for the chemical analysis of produce, of fertilizers, etc., and by working at the solution of the important economic and technical problems that concern production. When the Association transformed itself into the central syndicate, its rules were altered by decree of 23 June 1910 and it united in one federation all the associations and all the syndicates that agreed to combine.

The Central Syndicate devotes itself to the assistance of its affiliated associations and agricultural banks, the carrying out of propaganda work, the encouragement of agricultural instruction, the organization of competitions, the facilitating of members' purchases of fertilizers, seeds and plants; to arranging sales of produce and to encouraging the development of syndicates, agricultural insurance societies, agricultural credit banks, etc.

The work of the association is divided into different sections, each of which undertakes a special department, as for example, agricultural instruction, agriculture in general, viticulture, wine-making, stockbreeding agriculture in the islands and in the colonies, etc.

5. MEASURES ADOPTED BY THE GOVERNMENT.

Now that we have briefly examined the constitution and character of agricultural syndicates, we will draw attention to the principal measures affecting them passed by the Government during the war and in the course of the first few years after the war.

What especially deserves notice is the fact that agriculturists were empowered by the decree No. 2,633 of 20 September 1916 to form local associations designated *Síndacatos de Pecuária*. These syndicates are associations consisting of agriculturists and persons following cognate occupations, formed with the object of promoting stockbreeding, and in particular of improving one of the breeds of the district.

With this in view it is their business to establish the type of the breed selected, to buy breeding cattle and to keep them when bought; to direct all the work of preparation for competitions, and for exhibitions intended to act as propaganda; to facilitate members' purchases of animals, forage, implements and machines; to find markets for the products of stockbreeding; to arrange for transport of stock whether by land or sea; and to encourage in every way the formation of live stock insurance societies.

Where the formation of a syndicate on the lines of this decree is likely to be of advantage to the local stockbreeding industry, a subsidy for installation is granted, to be 500\$ for the first year, then 100\$ less for each succeeding year. If at the end of the fifth year the syndicate proves that its working has been of value, and that it cannot do without the State subsidy, the law allows a fresh annual subsidy to be granted which will be continued as long as is judged advisable.

Every year a competition is to be held between the stockbreeding syndicates of every district on the mainland, and there is to be a distribution of prizes to those whose services have been of the most value. These prizes vary from 100\$ to 50\$ and 20\$ for each district.

By another decree, No. 2,580, dated 18 June 1916, these syndicates are also to be formed in the province of Cape Verde, in accordance with the constituting law.

The decree No. 5,219 of 8 January 1919 consolidating the regulations made by previous decrees as to the establishment of co-operative agricultural credit banks, also regulates on broad lines everything relating to agricultural and stockbreeding syndicates.

Finally by the decree No. 7,032, of 16 October 1920, the Central Association of Portuguese Agriculture was converted into the Central Union of Portuguese Agriculture, with the object of centralizing the whole movement for agricultural co-operation in Portugal.

To the initiative of this Association, in concert with the Federation of Syndicates, the agricultural syndicates, the co-operative credit banks of the respective regions, the co-operative societies and all the other agricultural associations existing in the Republic, is due the institution of a new credit organization called the National Agricultural Bank of Portugal.

In 1920, there were 189 agricultural syndicates in existence on the mainland, and 36 in the adjacent islands. The former were divided as follows among the districts:

Districts	Number of Syndicates
Aveiro	11
Beja	15
Braga	9
Braganza	7
Castello Branco	6
Coimbra	15
Evora	16
Faro	8
Guarda	8
Leiria	12
Lisbon	17
Oporto	15
Portalegrè	5
Santarem	11
Vianna do Castello	8
Villa Real	11
Vizeu	5

It appears from a recent enquiry that only 41.2 per cent. of the 189 syndicates on the mainland are in regular working order; 33.8 per cent. give evidence of a certain activity, and 24.8 per cent. do not fulfil any useful function.

The greater number of the non-functioning syndicates are to be found in the northern region, in the districts of Coimbra and Castello Branco and north of these. In this region there are 105 associations, of which 75 are in working order, that is, 71.4 per cent. of the total: in the centre and south there are 84 of which only 66 are in working order, that is 78.5 per cent.

The total number of agriculturists who were members of agricultural syndicates in June 1920 was 28,784 or 551 more than in the previous year; a very small number, compared with the whole rural population of the mainland of Portugal.

But in spite of the restricted activity of the agricultural syndicates and their inadequate organization, considering the area and the agricultural population of the country, the sums represented whether by the capital owned the syndicates themselves or by the operations carried out, do nevertheless give an idea of the valuable services that these bodies would render to agriculture, if they could be extended over the whole country.

Figures are not available about the activity of most of the 36 agricultural syndicates in the islands.

* * *

The measures in force on co-operation and particularly on agricultural credit, together with the successive changes and modifications introduced by the various laws already quoted to meet the real needs of agriculture,

are proof of the care devoted by the Government to the encouragement and improvement of the agricultural industry of Portugal. Much better results would have followed, if the support had been forthcoming of a truer spirit of co-operation, to which indeed an appeal had been made by those very laws. The measures we have examined have nevertheless had important results. And it is beyond dispute that it was largely due to the facilities given, during the war, to agricultural co-operation that it was possible, in Portugal as elsewhere, to remedy the food shortage and to surmount the difficulties in the way of a profitable cultivation of the land.

E. F.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

BULGARIA.

STATE AID TO AGRICULTURAL CO-OPERATION. — Law relating to the improvement of agricultural production and the preservation of rural estates, ratified by decree No. 1, of 3 January 1922, and published in the *Derjaven Vestnik*, No. 231, of 13 January 1922.

Among the measures taken for the improvement of agricultural production by the new law of 3 January 1922, there may be conveniently noted here a whole series of provisions in favour of co-operation.

In the first place the Ministry of Agriculture can grant, for the benefit of co-operative societies for seed production, subsidies consisting in a supply of the necessary material and seeds at a reduction in price which may amount to 50 per cent.

If these societies set up and maintain seed selecting stations and place themselves under the Ministry of Agriculture as to agricultural taxation, they have the right to import the necessary material free of duty, to send it by rail at reduced rates, and can earn a grant up to 30 per cent. of the expenses of construction and management of the stations.

Other subsidies are granted to co-operative societies for land improvement or irrigation: these latter benefit by a reduction of the water-rate up to 50 per cent.

The co-operative societies of tobacco growers, besides profiting by the technical advice of Ministry officials, can obtain grants for the construction of storehouses and drying-sheds, up to 29 and 30 per cent. respectively of the cost of building: in addition the Agricultural Bank of Bulgaria insures up to 70 per cent. all tobacco warehoused in co-operative depots.

The provisions in favour of co-operative stockbreeding societies are quite as important. The law gives these encouragement by assistance in the following ways:

1. Purchase of breeding stock in Bulgaria or abroad, to be resold at cost price;
2. Grants for the maintenance and regular use of service stations;
3. Prizes for pedigree breeding stock;
4. Grants up to 30 per cent. of outlay to societies for the breeding of cattle suitable for rough grazing: this grant rises to 50 per cent. in the case of young horses, buffaloes, or cattle, intended for breeding purposes;
5. Grants for the establishment and upkeep of depots for rearing breeding stock (horses, buffaloes and cattle of special local breeds);
6. Permission to import breeding cattle duty-free and to send by rail at reduced rates;
7. Grants for the organization of shows, competitions, and public sales of breeding-stock.

Similar measures are provided for the benefit of poultry societies.

As regards vine growing and orchard cultivation, grants will be allocated to co-operative societies for the establishment of nurseries at least two hectares in extent for American vines, or for nurseries of not less than 2000 fruit-trees: other grants are intended to encourage the erection of buildings for the preparation of dried or bottled fruit; these grants may amount to 50 per cent. of the value of such buildings. In the same way, the Agricultural Bank of Bulgaria opens credits to co-operative sericulture societies for the construction of cocoon drying rooms, up to 80 per cent. of the value of such rooms.

In regard to apiculture, the Ministry will subsidize co-operative workshops for the preparation of artificial comb, sectional hives and other bee-keeping appliances, up to 50 per cent. of the value of the lathes and other tools, etc.

Co-operative production and sale in respect to dairying; refrigeration of animal or vegetable products; preparation of vegetable oils for the table and for industrial purposes; preparation of cotton, flax and hemp fibre; manufacture of attar of roses, of preserved fruits and vegetables, of chemical manures; basket-work; supply of the electric power required in agriculture, etc.: are encouraged by grants that may amount to 50 per cent. of the cost of organization.

Finally, co-operative societies organizing agricultural courses, itinerant or otherwise, can obtain recoupment of expenses incurred for this purpose, up to 50 per cent.

These measures should undoubtedly result in a marked and rapid further development of agricultural co-operation. M. B.

CZECHOSLOVAKIA.

THE ESTABLISHMENT OF A CO-OPERATIVE SOCIETY FOR THE PURCHASE AND SALE OF LAND. — *Deutsche landwirtschaftliches Genossenschaftsblatt*, No. 3. Prague, 5 February 1922.

On 25 June 1921 the German Co-operative Society for the Purchase and Sale of Land was founded in Prague on the initiative of the

Central Federation of German Agricultural Co-operative Societies of Bohemia, the Central Federation of German Co-operative Societies of Moravia and Silesia, the German Bank of Agriculture and Industry at Prague, the German Popular Bank in Bohemia and other bodies.

The aims of this co-operative society are as follows: (1) to assist members in the acquisition, equipment and management of their land; this last more especially by means of joint purchases of agricultural requisites without division of any profits accruing from such transactions among the members; (2) to act as intermediary in the letting and in the administration of estates; (3) to carry out rectification of boundaries and improvements; (4) to grant loans to members with a view to their participation in co-operative schemes and to render assistance to them in the repayment of mortgage debts; (5) to co-operate in measures introduced by public authorities for the re-distribution of holdings or for land reform in general.

Membership is open to individuals or corporations resident in the area of the Republic of Czecho-Slovakia. The value of the shares is fixed at 500 crowns, and the liability is limited to the value of the shares subscribed. The full assembly of members has the right of raising the value of the shares to 1000 crowns. The number of shares which can be taken up by members is unlimited. The federations above mentioned propose to take up a large number of shares, so that the society begins operations with an adequate working capital.

M. T.

GERMANY.

AGRICULTURAL CO-OPERATION IN 1919-20 — *Jahrbuch des Reichsverbandes der deutschen landwirtschaftlichen Genossenschaften für 1920*. 27th year. Berlin, 1921.

The General Position of Agricultural Co-operation. — In the financial year 1919-20 there was an unprecedented development in the number of new agricultural co-operative societies, a total of 3,421 being reached; 427 societies were dissolved and 2,318 were removed from German soil by the cession, in accordance with the Treaty of Versailles, of the regions in which their activities had been carried on (65 societies in East Prussia, 412 in West Prussia, 939 in Posenania, 139 in Schleswig-Holstein and 763 in Alsace-Lorraine). The net increase was thus 676 societies, about half of that reported for the previous year when a total increase of 1,293 had been shown. On 1 July 1920 the total number of agricultural co-operative societies reached 31,521, that is to say 81 per cent. of the total of registered co-operative societies (38,900). More than four-fifths of the German co-operative societies are thus agricultural co-operative societies. The membership numbers may be estimated on the basis of the averages supplied by the statistics of the National Federation as at least 3,000,000. Agricultural co-operation thus represents a form of agricultural organization far superior to any other in importance. As compared with

the total population (taking as the basis the census of 1 December 1910) there is one agricultural co-operative society for every 1,868 inhabitants, and as compared with the total productive area one co-operative society for every 867 hectares of land.

Of the existing 31,521 agricultural co-operative societies registered, 30,704, that is to say, 97.4 per cent., were affiliated to federations. Of these 20,883, that is 66.3 per cent., belonged to the National Federation of German Co-operative Societies (*Reichsverband der deutschen landwirtschaftlichen Genossenschaften*), and 6,987 to the General Federation of Raiffeisen Co-operative Societies (*Generalverband der deutschen Raiffeisengenossenschaften*). The other 2,884 co-operative registered societies are divided among eleven federations.

Central Co-operative Societies. — The number of central co-operative societies (central banks and central co-operative societies for purchase and sale) was 86.

(a) *Central Banks.* — The membership of the 24 central banks supplying information amounted at the end of 1919 to 14,842, thus distributed:

Co-operative societies.	13,617
Other corporate bodies.	240
Individual members.	985

The total business done by these banks amounted to 79 thousand millions of marks, as against 44 in the preceding year. In judging of these figures the depreciation of the mark must be borne in mind. The deposits of the co-operative societies with the central banks amounted to 2,925,449,856 marks (against 202,988,267 marks in 1913); their debts to the central banks to 476,802,619 marks (against 213,495,428 marks). The difference between the deposits and the debt of the co-operative societies was thus 2,449 million marks at the end of 1919 as compared with 10.5 million marks at the end of 1913. In their relations with the ordinary banks the credits of the central co-operative banks have gone up from 12,841,184 marks in 1913 to 597,051,164 marks in 1919; within the same time the credits of the ordinary banks with the central co-operative banks have gone down from 33,916,527 marks to 8,229,743 marks. These figures show very clearly the extraordinary changes which have taken place in the affairs of the central co-operative banks since the last year before the war. Of the 24 central co-operative banks, 21 closed the financial year with a profit, three with a loss to be ascribed to the reduction in the value of the war loans. The total profit amounted to 2,634,172 marks.

(b) *Central Co-operative Societies for Purchase and Sale.* — The membership of the 23 leading societies supplying information reached 15,076, including 10,591 co-operative societies, 262 other non-co-operative bodies, and 4,223 individual members. The purchases of agricultural requisites (fertilizers, feeding stuffs, seeds, machines, etc.) amounted to 40,487,959 quintals as against 64,512,141 quintals in 1913. The total value of the

purchases was 446.2 million marks as against 191.8 million marks in 1913. The drop in the purchasing of goods which could be observed in the financial year 1918-19 was even more strongly marked in 1919-20. The reasons for this must be looked for in the state of the exchange and the consequent difficulties of commercial relations with other countries, trading restrictions, strikes, transport difficulties and so on. The sales of agricultural produce (cereals, potatoes, etc.) amounted to 17,373,199 quintals as against 8,125,198 in 1913, at a total value of 333.7 million marks as against 73.8 million. A marked impetus was given to co-operative selling by the economic situation during the war and in the years after the war in comparison with the pre-war period. The total profit was 3,333,167 marks.

Rural Credit Banks. — In the financial year under consideration, 1,233 new rural banks were formed: 69 were dissolved, and 1,621 were alienated as a consequence of the treaty. The number of banks thus fell by 457, passing from 18,788 in 1919 to 18,331 in 1920.

Of the total number, 16,750 banks, *i. e.* 90.4 per cent. were on the basis of unlimited liability: 1,740, *i. e.* 9.5 per cent., limited liability, and 21, *i. e.* 0.1 per cent., liability to make unlimited supplementary payments.

As regards local distribution, there were 9,541 in Prussia, 4,563 in Bavaria, 1,402 in Wurttemberg, and the rest in other provinces. 17,427 banks were affiliated to the National Federation, of which 10,853 supplied information as to their business. The membership of the banks supplying information was 1,088,080, with an average of 100 members to each bank.

The working capital of the banks — the liabilities — amounted at the end of 1919 to 5,481,147,754 marks. The actual increase relatively to the previous year amounted to 850 million marks, and was mainly due to the increase of borrowed capital and of savings deposits. The owned capital has risen from 136,721,399 marks in the year 1918-19, to 140,801,608 marks in the year under consideration. This was made up of 49,860,640 marks, equal to 0.9 per cent. of the liabilities (as against 41,296,108 marks in the preceding year) of share capital; and of 90,940,968 marks, equal to 1.7 per cent. of the liabilities (as against 95,425,238 marks in 1918-19) from reserve funds and the surplus of the year's working. Although the share capital has considerably increased, its amount cannot be considered as important in view of the fall of the mark which means that the necessity of increasing this capital in the banks is a problem always becoming more and more pressing.

The fall of 4.5 million marks in the reserve funds and year's surplus is due primarily to the fact that many banks, having effected considerable investments in war loan, were obliged to make considerable reductions in calculating the value of their reserves to allow for the fall in the current value of these bonds. Borrowed capital represented 5,340,346,146 marks in the banks, constituting 97.4 per cent. of the total working capital.

The employment of the working capital, as represented by the assets,

was in all 5,471,536,834 marks and the difference between the assets and the liabilities thus showed a loss of 9,610,920 marks; 271 banks closed their balance sheet without either losses or profits, 8,230 with profits of 9,278,124 marks and 2,352 with losses of 18,889,044 marks. These losses are to be ascribed to the great fall in the value of the securities held resulting from the fall in the war loan quotations.

Co-operative Societies for Purchase and Sale. — 588 new co-operative societies of this kind were formed in the financial year under consideration, 27 were wound up, and 164 remained in territories alienated from Germany. The effective increase was thus of 397 societies, practically double of the increase in the preceding year. The total number of co-operative societies of this class amounted to 3,717, of which there were 1,468 (39.5 per cent.) with unlimited liability, 2,246 (60.4 per cent.) with limited liability and 3 (0.1 per cent.) with liability to make unlimited supplementary payments. 2,623 co-operative societies were affiliated to the National Federation and 2,490 of these supplied information as to their activity. Their membership amounted to 302,494, their total working capital to 165,012,525 marks, of which 11,483,115 marks was share capital. The ratio between the owned and the borrowed capital was that of one to 2.8. As regards the collective purchases a decrease was reported, for the financial year under consideration, of 2.1 million quintals for fertilizers and an increase of 0.2 millions for fodder. Purchases of seed rose from 0.58 million quintals in 1918-19 to 1.81 million quintals in the financial year under consideration. The total value of the purchases amounted to 252.3 million marks, as compared with 182.5 million marks in the preceding year.

In collective sales there was an increase in 1919-20, while in 1918-19 there had been reported, for the first time since the beginning of the war, a decrease in this field of co-operative activity.

The quantity of cereals sold was 9 million quintals, against 7.5 million quintals in the preceding year. On the other hand no change has taken place in the sales of potatoes: as in 1918-19, they reached 4.8 million quintals. The value of agricultural produce sold reached 205.9 million marks as against 163.9 million marks in 1918-19.

Financially the results were as follows: 84 co-operative societies had neither profit nor loss, 2,166 registered profits of 4,776,992 marks and 240 a loss of 410,452 marks. The net profits were equal to 4,366,540 marks.

Co-operative Dairies. — 79 new co-operative dairies were formed, 88 were closed; thus in this year there was a total decrease of nine societies. Besides, in consequence of alienation of territories, the number of co-operative dairies was reduced by 249. Thus a total diminution of 258 societies is registered, while there is a total of 3,304 co-operative dairies in the financial year under consideration as compared with 3,562 in the preceding. The causes of this decrease are to be found in the economic situation both during and subsequently to the war. Of the 3,304 co-operative dairies, 2,177 (65.9 per cent.) were on the basis of unlimited liability, 1,063 (32.2 per cent.) on that of limited liability, and 64 (1.9

per cent.) on that of liability to make unlimited supplementary payments. 2,223 societies were affiliated to the National Federation, of which 1,848 were able to supply information as to their activity. The membership of these latter amounted to 205,122, that is on an average 111 members to a dairy. As regards other milk suppliers, taking 16 federations, their numbers have risen from 72,004 in 1918-19 to 98,074 in the last financial year. 510 dairies supplied information as to the number of cows: they possessed — a total of 375,919 head, an average of 737 each.

The working capital consisted, in the case of 1,848 co-operative dairies, of a total of 100,545,878 marks (as against 96,375,904 marks in the case of 1,932 dairies in the preceding year). This sum was made up of 7,618,988 marks of share capital, 25,706,201 marks of reserve funds and 67,220,689 marks of borrowed capital. The greater part of the capital belonged to the societies of the former kingdom of Saxony, where large dairies were the rule: on the other hand the smallest sums were those forming the capital of the federations of Southern Germany where there are only small businesses.

The volume of milk supplied was, in respect to 1,574 dairies, 1,055,911,321 litres, an average of 670,846 litres per society, as against 745,494 litres in the previous year, and 1,139,120 litres in 1913. Of this total quantity of milk supplied, 850.7 million litres were converted into butter, 106.9 were sold, 7 million litres were converted into cheese, and 1.3 million litres were used in other ways. The corresponding figures for 1914 were as follows: milk supplied to the dairies, 2,234.7 million litres: made into butter 1,984.5 million litres; sold, 243 million litres; made into cheese, 5.5 million litres; used in other ways 1.7 million litres.

At the present time as before the war the greater part of the milk supplied to the dairies is converted into butter. The proportion of fresh milk sold rose from 14.9 per cent. in the year 1918-19 to 18.6 per cent. in the financial year under consideration, which means that the federations and the co-operative dairies have taken a much larger share of the business of supplying milk to the urban centres.

The total receipts from the sale of milk and milk-products were, in respect to 1,489 co-operative dairies 426,635,777 marks, an average of 43.8 pfennings per litre or kilogramme of milk. 1,672 dairies furnished information as to the financial results. Of these, 292 had neither profits nor losses, 1,189 profits to the total amount of 2,861,042 marks, and 191 losses amounting in all to 946,783 marks.

Other Co-operative Societies. — In respect to co-operative societies of miscellaneous types, 1,521 new societies were registered, 243 were wound up and 284 lost by alienation of territory. The net increase is thus 994 societies, virtually double of that of the preceding year (510). The total number of these societies thus comes out at 6,169, of which 1,935 (16.8 per cent.) are on the basis of unlimited liability, 5,119 (83 per cent.) on that of limited liability, and 15 (0.2 per cent.) have liability to make unlimited supplementary payments. Limited liability has here a much greater importance than in any other type of co-operative society.

The total working capital in respect to 2,068 co-operative societies amounted to 224,808,803 marks, of which 56,374,495 marks, that is 25.1 per cent., is owned capital. The ratio between owned capital and working capital is especially favourable in the case of co-operative mills, where the percentage of owned capital is 52.3 (for 29 societies the working capital amounted to 6,000,000 marks and owned capital to 3,100,000 marks), in the case of sugar factories where the percentage is 51.9 (for two societies working capital amounted to 860,000 marks, and owned capital to 446,000 marks), and in the case of co-operative societies for the sale of honey where the percentage is 44.6 (for four societies total capital amounted to 59,443 marks, and owned capital to 26,513 marks). The lowest percentage is found among co-operative warehousing societies, standing at 11.1 (for 26 societies total capital amounted to 20,214,745 marks and owned capital to 2,240,589 marks), and among the co-operative societies for the removal of rubbish where it stands at 7.4 (for four societies about 300,000 marks of total capital and 22,000 marks of owned capital). Capital, both total and owned, has increased in an especially marked way with the co-operative societies for supply of electric power: 746 societies have nearly 60 million marks of total capital and 18 million marks in round figures of owned capital. Next to these come the vinegrowers' co-operative societies: 119 with 53 million marks of total capital, and a little more than 7 million marks of owned capital.

The financial position of the different co-operative societies may be thus summed up: on the whole losses have occurred in the case of the co-operative societies for distilling, for the removal of rubbish, for automobile services, brick-making and the manufacture of acetylene gas; the societies for potato-drying, sale of cattle, sale of fish, for ploughing and threshing, for supply of water, for colonization of land, and for co-operative building show varying results: a favourable issue is reported in the case of societies for the sale of poultry and eggs, for the cultivation of flax, for the sale of preserved fruits and vegetables, for the sale of honey, the sale of spirit, and in the case of the co-operative sugar factories. The societies of this last group either have realized profits or have kept their losses within narrow limits.

M. T.

GREAT BRITAIN AND IRELAND.

AGRICULTURAL CO-OPERATION IN ENGLAND AND WALES IN 1920-21. — THE REPORT OF THE AGRICULTURAL ORGANIZATION SOCIETY FOR THE YEAR ENDED 31ST MARCH, 1921. London, 1921.

In reviewing the work of the Agricultural Organization Society for the year ended 31 March 1921, the Report opens by stating that propaganda work for the formation of farmers' societies is now practically finished, societies having been established in almost every part of the country. The Society can, therefore, give its whole time to general services on behalf of the movement as a whole and special assistance to any particular society.

Hitherto the Society's main source of income has been a grant from the Development Fund, the amount of which is dependent on the sum raised in voluntary income, *e. g.*, affiliation fees and subscriptions. For the year 1 April 1921 to 31 March 1922, the grant provisionally promised was equal to twice the voluntary income raised in 1920-1921, with a maximum of £22,000. The voluntary income for 1920-21 amounted to £5,793 and, therefore, the Society was entitled to a grant of £11,586. In view of this the Governors could not anticipate a total income in 1921-22 of more than £22,000, and they decided to reduce their expenditure by re-organizing the Society, reducing the headquarters staff and abolishing the Branch Organization. For 1922-23 the Development Fund Grant will only be equal to the voluntary income in 1921-22, and it will then cease altogether. The Governors accordingly suggest a scale of subscription for each society of 2s. 6d. per member for the first 500 members; 1s. 6d. per member thereafter up to 1,000 members; and 1s. 0d. per member over 1,000 members. This should produce an income of between £8,000 and £9,000 a year which would increase with the membership of the societies.

General Statistics. — The table on page 293 contains statistics for the year ended 31 March 1921 of the societies affiliated to the Agricultural Organization Society.

Co-operative Dairying. — The difficulties of the co-operative dairy societies have very greatly increased since the Government control of prices has been removed. The urgent demand for whole milk during the war brought into the market many districts which previously had made butter and cheese only, with the result that when the war time scarcity of milk had passed these districts were left in the market as additional competitors for the existing outlets. Moreover during the war the large non-co-operative milk companies were consolidating their position in such a way that, whereas the dairy societies had to meet the post-war difficulties as so many struggling units, the trade had to a large extent consolidated its control, and could meet difficulties and business opposition with the strength of unified command. The trade's advantages were increased by the fact that they had secured a practical monopoly of the retail outlet in London, and also were able to call on a great amount of capital. Farmers' societies, on the other hand, were competing against each other for the same outlet with the inevitable result of price undercutting and serious loss all round.

As a result of these conditions, the position was considered by the Associated Milk Producers' Council, and an enquiry put to the United Dairies, Ltd., as to whether they were prepared to discuss an arrangement which would give to the producers an effective share of control, and would preserve the co-operative principle. A scheme was proposed which would have combined the business management and distributing arrangements of United Dairies Ltd., with the collecting organization of the co-operative movement. The main features of the proposal were:—

Producers to hold half the capital and to pool their interests for purposes of a block vote.

Statistics of Agricultural Co-operative Societies Affiliated to the Agricultural Organization Society, for the year 1920.

	Number of societies	Number of members	Sales			Total turnover £
			Agricultural requirements £	Farm produce £		
Societies for the purchase of requirements	222	55,913	9,426,413	1,893,115	11,319,528	
Dairy societies	61	9,018	578,298	3,826,893	4,405,191	
Egg and poultry societies	57	13,280	130,960	643,814	774,774	
Auction mart and produce societies	31	5,287	400,897	188,535	589,432	
Slaughterhouse societies	10	1,231	216,666	220,720	437,386	
Total . . .	381	84,729	10,753,234	6,773,977	17,526,311	
Small holdings and allotment societies (1)	1,113	116,022	—	—	171,651 (2)	
Miscellaneous societies	46	6,652	—	—	116,447	
Credit societies	18	355	—	—	687 (3)	
Grand total . . .	1,558	207,758	—	—	17,815,096	

(1) Number of tenants, 45,010. Area held from public authorities, 12,790 acres; from other landlords, 5,439 acres; total, 18,229 acres. — (2) This figure represents the sales of such societies belonging to this group as supply requirements of self produce. — (3) Loans granted during the year.

Prices to be fixed by a joint committee — half producers and half distributors — with an independent chairman.

Interest on share capital to be limited.

After payment of fixed interest on the capital, 75 per cent. of the balance of profits to be distributed to milk producers through the co-operative movement.

The Agricultural Organization Society was unable to take part in the negotiations, owing to the conditions attached to the grant from the Development Commissioners, and these, therefore, had to be conducted by representatives appointed by the societies themselves. The difficulties were increased by the fact that the Council of the National Farmers' Union could not see their way to endorse the scheme as drafted. Reference back at almost every stage, by the co-operative representatives to local committees, who themselves found it difficult to arrive at any definite decisions made progress impossible and finally the scheme had to be abandoned, the co-operative movement suffering through not being able to make decisions as readily as could the Directors of United Dairies, Ltd.

The Co-operative Sale of Wool. — During the year the co-operative sale of wool on a large scale was undertaken by the Society and a very large number of fleeces were offered on the London Wool Market. Unfortunately this initial experiment coincided with a serious slump in prices.

Co-operative Slaughterhouses. — With regard to co-operative slaughterhouses, the Report states that this branch of co-operative work has not made the progress anticipated (1). It is thought that in view of the objection prevailing in some districts to slaughterhouses which purchase beasts on the dead weight system it might be desirable to establish co-operative auction marts in those districts. Auction marts have been operated with marked success by some societies; the Kent and Sussex Farmers, Ltd., with six marts, is a case in point.

Co-operative Marketing of Fruit and Vegetables. — Various methods of disposing co-operatively of fruit and vegetables have been successfully tried in different districts. In the fruit districts of the West the co-operative auction in the growers' district has found much favour. Other societies bulk their members' produce and send it away to the consuming centres for sale. A third system is now being started, namely, the establishment by the growers of their own salesmen in the markets.

Co-operative Sale of Eggs. — Interest has been taken in the co-operative marketing of eggs for many years, but comparatively little progress has been made, except in a few districts, owing to difficulties with regard to outlets. At a meeting of the National Utility Poultry Society in February 1921, a sub-committee was appointed to investigate the question in consultation with the Agricultural Organization Society. This committee drafted a scheme providing for only one selling organization in which the collecting societies will be partners, and which they will finance and control. The scheme also makes an interesting departure in providing for the direct

(1) See our issue of March-April 1922, page 28.

inclusion of the large commercial poultry farmers who are situated in districts where there are no depots.

The Agricultural Wholesale Society. — The campaign for additional capital, which was opened in the summer of 1920, met with an organized attack from interested quarters, and the total sum of £250,000 aimed at was not reached. Fresh capital, however, was subscribed for new trading operations through the Agricultural Wholesale Society Development Company, Ltd., which was formed for the purpose. Rigid economy being necessary, the activities of the Agricultural Wholesale Society were restricted for the time being to the supply of feeding stuffs, fertilizers, seeds, dairy machinery and to the sale of eggs on a brokerage basis.

Allotments and Small Holdings. — During the year under review there was no falling off in the demand for allotments. A question which always confronts the allotment-holder is that of security of tenure. Direct ownership is not possible in the majority of cases, but co-operative land purchase has met with great success in parts of the country. Generally speaking the plan adopted provides for the purchase of the land by the allotment society, the members becoming holders of plots varying in size according to the number of shares held by each in his society, such shares being of the value of £1 each, of which 5s. is paid on application, 5s. three months later and the balance in two instalments of 5s., each payable six and twelve months after application respectively. The land is let by the society to the members at a rent that will produce sufficient to pay interest on paid-up capital, rates and taxes and other charges.

The practice of federating societies into a group, and of forming branches of the same society was extended during the year under review with good results. There were two outstanding examples of the principle of central organization or federation. The Bedfordshire, Huntingdonshire and District Smallholdings and Allotments Federation, Ltd., which has as members both allotment-holders and small holders, includes twenty separate societies and has twenty-two branches. The Sutton Bridge and District Agricultural Co-operative Society only had individual small holders as members, but it comprised seven branches and others were in course of formation. Intertrading between allotment societies and the larger trading societies was encouraged and several farmers' societies offered trading facilities to small holders' and allotment holders' societies. The movement towards a wider co-operation was also shown in the growing practice of holding District Conferences periodically.

Civilian small holders have not greatly increased in number during the year, chiefly owing to the fact that Local Authorities are precluded from entertaining any applicants for land other than ex-service men. However, organization amongst this class is proceeding steadily, but somewhat slowly. On the other hand progress in the organization of ex-service men has been marked. Owing to lack of funds the Society was unable to organize every district simultaneously, and work was first concentrated on the Eastern Counties. Here the organization aimed at was the formation of

societies and branches of societies in localities where small holders are settled, with three central organizations at Wisbech, Cambridge and Bedford. In carrying out the organization the Society has employed three methods, (a) the acceptance of the facilities now being offered by farmers' societies to small holders to become members; (b) formation of new societies; (c) formation of branches of existing societies. The choice of method is determined by the circumstance of the locality concerned.

The work among the ex-servicemen has resulted in the discovery that there is a considerable difference between the civilian and ex-service small holders in their grasp of co-operative principles. On the whole the latter are keener, quicker to see opportunities and to grasp them. The former are conservative and more averse from new methods, as is natural amongst men who all their lives have had to rely on their own efforts to obtain a living from the land.

W E H. L.

HUNGARY.

THE CHARACTER OF HUNGARIAN CO-OPERATION. — Horváth (Johann V.): Das Genossenschaftswesen in Ungarn. — Ungarische Jahrbücher, Vol. 1, Part 4. Berlin and Leipzig, December 1921.

Among the characteristic features of Hungarian co-operation are its centralization and its strict regulation by legislative measures. Up to 1875, the year in which the codification of commercial law took place, the co-operative society did not yet correspond to a fixed legal conception. Definite regulation followed with the law of 1898, which laid down the legal bases for the constitution of co-operative societies. Centralization does not mean in Hungary the establishment of central co-operative societies by means of the union of separate societies, but the founding of small co-operative societies by the agency of the central federation. This system corresponds to the spirit of the small Hungarian cultivator, who is lacking in initiative and joins an independent credit institution if that is in a position to give him immediate assistance. The liability of the members is fixed at a low figure. The central co-operative societies rely for their finance essentially on State support.

Apart from State intervention both private individuals and co-operative societies have power to co-operate for the building up of capital. With this view the shares of the central co-operative credit banks are divided into two groups: foundation shares and ordinary shares. The first have as a rule the nominal value of 1000 crowns and are subscribed for by bodies and individual members who do not intend to make use of the credit of the society. The ordinary shares, whose nominal value is 200 crowns, are taken up by the several societies obligatorily in the proportion of one share for every 3000 crowns of capital they hold.

The most important central co-operative society is the Central Co-operative Society of National Credit (*Országos Központi Hitelrövidítő-társaság*), which came into existence in 1898. Its owned capital amounts to about

150 million crowns. The State subsidy has been recently increased from one million to 25 million crowns. This co-operative society grants to its members — small cultivators — besides personal loans, mortgage long term credit, for a period of 50 years. An important function was delegated to it by the law of 1920 relating to land reform and to the establishment of small family holdings. The administrative duties that fall to the society, as also to the National Federation of Hungarian Credit Banks, consist in the parceling out of the estates, arranging for the assignment of the portions, the creation of small holdings to be purchased by instalments, and generally the carrying out of all the revenue and banking operations contemplated by the measures of reform. The Central Co-operative Society is authorized to issue certificates of deposit and of pledge, to open depositories, in short to exercise the right of control over the co-operative credit banks, whether affiliated to it or not. More than 2,500 co-operative credit banks were formerly affiliated to this Central Society, but the number has been reduced since the revolution to 980.

Next in importance comes the *Hangya*, the central co-operative distributive society of the Federation of Hungarian Farmers. Founded in 1898, on a purely co-operative basis and as the creation of the Count Alexander Károlyi, it has not up to the present made any application for State aid.

Among these central co-operative federations should be mentioned the Federation of Co-operative Societies of Hungary, an institution whose aim is the promotion and development of co-operation generally, and the *Futura-Warenverkehrs Aktien Gesellschaft der Ungarischen Genossenschaftszentralen*, which organizes trade in agricultural and industrial products, both in Hungary and abroad.

During the war there were in Hungary 9,000 co-operative societies, of which 8,000 were incorporated in the central federations of co-operative societies. Subsequently to the loss of two-thirds of its territory, there were in 1919 in Hungary not more than 2,500; but a year later these were increased by 1,116, so that at the end of 1920 there were in existence altogether 3,616 co-operative societies. While the population has fallen to 28 per cent. of the former figure 42.9 per cent. of the cultivable area has remained Hungarian, with the effect that the agricultural character of the country has become still more accentuated: correspondingly a tendency is evinced to place co-operative organizations more and more at the disposal of agriculture.

M. T.

Credit

UNITED STATES.

THE WORK OF THE WAR FINANCE CORPORATION IN AID OF AGRICULTURE.

SOURCES (OFFICIAL):

THE WAR FINANCE CORPORATION ACT (Apr. 5, 1918, 40 Stat., 506).

THE VICTORY LIBERTY LOAN ACT (Mar. 3, 1919, 40 Stat., 1309).

THE AGRICULTURAL CREDITS ACT (Aug. 24, 1921, Public No. 60 — 67th Congress).

CIRCULAR NO. 1 OF THE WAR FINANCE CORPORATION: ADVANCES TO EXPORTERS, DEALERS, AND BANKS, BANKERS AND TRUST COMPANIES UNDER SECTIONS 21 AND 22 OF THE WAR FINANCE CORPORATION ACT TO ASSIST IN EXPORTING DOMESTIC PRODUCTS OR CARRYING DOMESTIC PRODUCTS FOR EXPORT. Issued 1 October 1921.

CIRCULAR NO. 2 OF THE WAR FINANCE CORPORATION: PART I. — INFORMATION FOR BANKS, BANKERS OR TRUST COMPANIES APPLYING FOR ADVANCES UNDER SECTION 24 OF THE WAR FINANCE CORPORATION ACT. PART II. — INFORMATION FOR BANKS, BANKERS OR TRUST COMPANIES DESIRING TO SELL TO THE WAR FINANCE CORPORATION NOTES OR OTHER INSTRUMENTS OF INDEBTEDNESS SECURED BY AGRICULTURAL PRODUCTS, INCLUDING LIVE STOCK, IN ACCORDANCE WITH THE SECOND PARAGRAPH OF SECTION 24 OF THE WAR FINANCE CORPORATION ACT. Issued 1 September 1921.

CIRCULAR NO. 3 OF THE WAR FINANCE CORPORATION: INFORMATION FOR CO-OPERATIVE ASSOCIATIONS OF PRODUCERS APPLYING FOR ADVANCES UNDER SECTION 24 OF THE WAR FINANCE CORPORATION ACT. Issued 1 October 1921.

FOURTH ANNUAL REPORT OF THE WAR FINANCE CORPORATION FOR THE YEAR ENDED NOVEMBER 30, 1921. — Washington, 1922.

Originally created as a war agency under an Act dated 5 April 1918, the War Finance Corporation was empowered by the American Congress in March 1919 to assist in the task of reconstruction. It was authorized, in order to promote commerce with foreign nations through the extension of credits and to aid in the transition from the conditions of war to those of peace, to make advances not exceeding \$1,000,000,000 to American exporters and American banking institutions for the purpose of financing the exportation of domestic products. This authority was exercised until May 1920, when the activities of the Corporation were suspended. In the Autumn of 1920 when the collapse in commodity markets became acute, the question of exports again became a matter of general interest; and the Congress, in January 1921, directed that the activities of the Corporation be resumed.

§ 1. THE WORK OF THE CORPORATION IN FINANCING EXPORTS.

As raw cotton is America's greatest agricultural export product, attention was directed first to this important factor in the problem, and a committee, consisting of the Secretary of the Treasury, the Secretary of Commerce, and the Managing Director of the War Finance Corporation, was appointed by the President to study the banking facilities available in the South for the financing of cotton. It became increasingly clear, however, that the situation in Europe had changed. Sound business men there were no longer willing or anxious to buy on credit because of the risk involved in exchange fluctuations. To meet this situation special action was necessary. The Corporation, as a first step, offered to make advances to finance the carrying of stocks of American cotton in foreign warehouses, and some advances were made for this purpose. But it was soon found that this did not solve the problem. It was then suggested that it would be desirable to make advances on cotton stored in America which was under contract for sale to foreigners, and the Corporation consented to render such assistance. Applications for advances of this kind, however, were not filed on a sufficiently large scale to become an important factor, and a further step became necessary.

Early in July the Corporation agreed to make an advance of \$5,000,000 to a co-operative association in Mississippi to finance the carrying of 100,000 bales of long-staple cotton until it could be exported conveniently. Under the terms of this advance the association agreed that out of the cotton pledged as security for the loan it would export within a year a sufficient quantity to repay the full amount of the advance — the cotton to be held in American warehouses until the time was opportune for export. The announcement of this loan stimulated considerable interest, and within a short time the Corporation authorized advances to other co-operative associations in Texas, Oklahoma and Arizona, as well as to banking institutions in the South, to assist in financing large quantities of cotton for export in a similar manner. In all these transactions care was taken to insure the use of the funds advanced by the Corporation solely for the purpose of orderly marketing, without encouraging holding for speculative purposes. In all, the Corporation agreed to finance approximately a million bales of cotton, and it was not long before there was a marked improvement in the cotton situation. But it was not merely the agreement to finance a million bales, or even the ability to do so, that changed the situation in the South. A more important factor was the general realization that if the Corporation could develop satisfactory methods of financing for 1,000,000 bales it could do so for such additional amounts as might be necessary. As soon as there was assurance that the industry would be adequately financed buyers both at home and abroad began to resume purchases, with considerable effect on the market for cotton and cotton goods.

It should be pointed out that it is not within the province of the War Finance Corporation to conduct its business with the view of affecting

prices. It is its duty, however, to offer adequate financing on a sound business basis, and if markets and prices are demoralized because of inadequate financing, it would be natural for prices to be affected when the financial difficulty has been met.

The activities of the War Finance Corporation under its export powers were not confined to cotton. The Corporation indicated its readiness to finance other agricultural commodities intended for export in accordance with the methods that had been devised for financing cotton, which may be summarized as follows :

(1) For prompt shipment against deferred payments.

(2) For future shipment within a reasonable time against either prompt or deferred payments, where the products are under a definite contract of sale.

(3) For prompt shipment to warehouses in foreign distributing points, to be held there for account of American exporters and bankers for marketing out of warehouses.

(4) For shipment within a definite period, the products to be held in warehouses in America until they can be marketed abroad in an orderly manner, the applicant to give definite assurance that the agricultural products pledged as security for the advance will be exported, before the maturity of the advance, to an aggregate amount (including insurance and freight if paid by the exporter to domestic insurers and carriers) not less than the amount of the advance.

Large advances were authorized to co-operative associations on wheat, dried fruits, canned fruits and vegetables, and to exporters or banking institutions on tobacco, condensed milk and meat products. A limited number of applications involving the exportation of manufactured products, such as railway equipment, copper and sugar-mill machinery, also were approved.

§ 2. EXTENSION OF THE POWERS OF THE CORPORATION.

With the development of the activities of the Corporation, it was increasingly clear that export financing alone would not be sufficient to meet the needs of agriculture. On account of the changed situation in Europe and of the conditions at home, the Americans were confronted with the necessity of selling their staple products more gradually than in former years. Not only was the market abroad slow, but American merchants and manufacturers were operating on the basis of the lowest possible stocks, and were buying only to meet current demands. This naturally resulted in forcing large quantities of raw materials, which normally are carried by mills, wholesalers, jobbers and retailers, back upon the original producers and the banks which do their financing. A condition of acute distress developed in the agricultural sections of the country, and if disaster was to be averted extraordinary action was needed to meet the situation.

After a careful study of the whole problem, certain amendments to the War Finance Corporation Act were proposed, considered by the Congress,

and embodied in the Agricultural Credits Act of 24 August 1921. The Act broadened the powers of the Corporation and gave it authority to make advances not only to exporters and banking institutions, but also to dealers in, and handlers of, agricultural products, including co-operative associations, for the purpose of financing the carrying of such products until they could be exported or sold for export. The Corporation also was authorized to make advances to persons, firms or corporations outside the United States purchasing agricultural products in the United States on condition that all notes or other instruments evidencing such advances were in terms payable in the United States in currency of United States and were secured by adequate guarantees or indorsements in the United States, or by warehouse receipts, acceptable collateral, or other instruments in writing conveying or securing marketable title to agricultural products in the United States. The Act further empowered the Corporation to make advances to any bank, banker or trust company in the United States, or to co-operative associations of producers, which had made advances for agricultural purposes or had discounted or rediscounted notes, drafts, bills of exchange or other negotiable instruments issued for such purposes.

Shortly after the passage of the Agricultural Credits Act the attention of the Corporation was directed to the seriousness of the live-stock situation. Immature stock was being forced on the market, and in many cases breeding herds were being sacrificed. On account of the condition of many of the small banks in the West and Southwest and the limitations or restrictions imposed upon them by State laws it was clearly apparent that additional financing machinery should be provided to meet the needs of the live-stock industry. The matter was considered and the Corporation suggested to the local bankers and business men the advisability of establishing new financing organizations for the purpose of bringing new capital into the field of live-stock finance. New agricultural and live-stock loan companies have been formed in the cattle country and the Corporation has made advances to them. These companies are in no sense agencies of the Corporation, and stand in exactly the same position as any other financing organization that the Corporation deals with.

With the approval of the Secretary of the Treasury and the Secretary of Agriculture the Corporation, early in November 1921, took special action to deal with the situation in the corn belt where, as the result of two bumper crops and reduced feeding operations, there accumulated a large surplus of corn. It appointed a committee, known as the Corn Belt Advisory Committee, to aid in devising methods for meeting the situation. Following a meeting of the Committee with the directors of the Corporation in Washington on 16 November 1921, it was announced that the Committee would endeavour to obtain the help of banking organizations and institutions generally throughout the corn belt with the view of providing adequate financing for the more orderly marketing of the corn crop and the feeding of live-stock. It was stated at the same time that, if local institutions should find themselves unable for one reason or another to take care of the situation, the Committee would find ways and means to create

additional facilities for financing the farmers. The advances made by the Corporation in the corn belt resulted in a noticeable improvement in the corn situation.

§ 3. THE BUSINESS ORGANIZATION.

The management of the War Finance Corporation is vested in a board of directors consisting of the Secretary to the Treasury, who acts as chairman, and four others appointed by the President of the United States.

The capital stock of the Corporation was fixed at \$500,000,000, all of which was subscribed by the United States of America. This capital could be called up at such time or times as might be deemed advisable upon a vote of three-fifths of the Board of directors, with the approval of the Secretary of the Treasury. Further capital could be obtained by the issue of notes or bonds up to three times the amount of the paid-in capital. These notes or bonds were to mature not less than six months or more than five years from the respective dates of issue; they were to be a first charge on all the assets of the Corporation and the Corporation may not at any time mortgage or pledge any of its assets. The Corporation may issue notes or bonds up to 1 January 1925 but no notes or bonds shall mature later than 1 July 1925. Upon terms as may be determined by the board of directors, with the approval of the Secretary of the Treasury, bonds may be issued payable in any foreign money or with the option of paying in foreign money. The United States is not liable for the payment of any bond or obligation or interest thereon issued or incurred by the Corporation.

After the passage of the Agricultural Credits Act, steps were promptly taken by the Corporation to set up the machinery necessary for its administration. To facilitate the handling of applications from banking and financial institutions for advances for agricultural purposes it was decided to establish agricultural loan agencies in the important agricultural and live-stock districts. Committees composed of bankers, business men and others, who serve without compensation, were designated to take charge of these agencies, to receive applications, to pass upon the security offered and to make recommendations to the board of directors at Washington for review and final action. In considering applications they were authorized, whenever in their judgement such action was necessary, to call for additional information, including statements of condition of the makers or indorsers of notes, drafts, bills of exchange or other evidence of indebtedness offered as collateral security for the advance applied for. The Committees were organized as promptly as the members could be selected and appointed, and within a short time they were ready to take up their duties. In all, 33 agencies were created, each of which was authorized to establish headquarters at the place that ordinarily serves as the financial and trade centre of the surrounding territory and to employ a secretary who would devote his entire time to the work.

§ 4. THE DIFFERENT TYPES OF ADVANCE.

The different types of advance which the War Finance Corporation is authorized to make may be classified as follows:

1. Advances for the purpose of assisting exportation.

(a) Advances to exporters (Section 21, sub-section 1 of the War Finance Corporation Act, as amended).

(b) Advances to banks, bankers and trust companies which have made advances to exporters (Section 21, sub-section 2).

2. Advances to assist in carrying agricultural products for export.

(a) Advances to dealers and associations of producers (Section 22, paragraphs a and b).

(b) Advances to banks, bankers and trust companies which have made advances to dealers or associations of producers (Section 22, paragraph c).

3. Advances to institutions which have made advances for agricultural purposes.

(a) Advances to banks, bankers and trust companies which have made such advances (Section 24).

(b) Advances to co-operative associations which have made such advances (Section 24).

In addition the Corporation is authorized in exceptional cases to purchase from banking institutions instruments of indebtedness secured by instruments conveying or securing marketable title to staple agricultural products, including live-stock (Section 24).

It will be noted that the Corporation is not authorized under the law to deal directly with individual producers. It is reaching the farmers through their co-operative associations and their local banking institutions, with which they are accustomed to do business, and which are in close touch with the conditions in their communities. By making advances to these institutions on the basis of their agricultural paper, the Corporation is accomplishing two things; enabling the banks with slow assets to carry the existing loans of their farmer customers for a longer period, thus removing the necessity for forced liquidation and relieving the financial pressure which otherwise would make it necessary for large numbers of producers to sacrifice their products without regard to the consuming demand, and putting many of the banks, especially those which are in good financial condition, in funds for making new loans and for taking care of the needs of the farmers and stockmen in the surrounding territory to the extent that their individual credit may warrant.

The aggregate amount of advances and of purchased instruments remaining unpaid at any time must not exceed \$1,000,000,000.

§ 5. ADVANCES FOR THE PURPOSE OF ASSISTING EXPORTATION.

An advance to assist in financing an export may be made by the War Finance Corporation when the products are ready for immediate shipment,

or at such time prior thereto as may be necessary, in the Corporation's opinion, effectually to assist in their exportation. Thus: (a) Where the exporter has made a definite contract for the exportation of products at a specified time, the Corporation may make the advance a reasonable time before the date of shipment, in order to enable the exporter immediately to purchase and hold products for future exportation under such contract; (b) Where the products to be exported are being manufactured for export under a contract which requires the exporter to make periodical payments to the manufacturer as the work progresses, advances may be made by the Corporation to the exporter (or to a bank which is making advances to the exporter) as such periodical payments are made; (c) Where the exporter himself is manufacturing the products to be exported, advances may be made as disbursements are made by him for material and labour.

Advances may be made by the Corporation against promissory notes or other instruments imposing on the borrower an unconditional obligation to repay the advance at maturity, with interest, adequately secured in each instance. The security required by the Corporation will depend upon the nature of the transaction and the financial worth of the applicant, and may consist of endorsements or guaranties; notes bonds or other instruments deposited as collateral; warehouse receipts, bills of lading, or other documents representing the products to be exported; or any other form of security.

Where warehouse receipts, bills of lading or other documents are pledged as security, and the nature of the transaction requires that they be forwarded abroad before the Corporation's advance is repaid, they will be placed in the custody of a reputable bank, to be approved by the Corporation, against its receipt, stipulating that the bank and its correspondents will act as trustees for the War Finance Corporation, but at the expense of the applicant, in handling and forwarding the documents.

Where the nature of the transaction to be financed requires that the receipts be retained in the locality in which the applicant's business is transacted for the purpose of facilitating substitutions, withdrawals and exchanges of documents, arrangements may be made by which the collateral will be deposited with a Federal Reserve Bank, branch bank, or selected bank, at the expense of the applicant.

Applicants for advances must first make a preliminary application to the Corporation. The application should be sufficiently detailed to appraise the Corporation of the business in which the applicant is engaged, the character and terms of the transaction to be financed, the amount and maturity of the advance desired, the nature of the obligation and security offered, the approximate time when it is expected that the advance will be called for, and such other information as may be helpful. Where the applicant is an exporter the preliminary application should indicate the efforts that have been made to obtain the funds applied for through banking channels and the results of such efforts, also the application should be accompanied by the latest available financial statement of the applicant.

and of all persons, firms or corporations whose obligations, indorsements or guaranties are to be tendered as security. On approval the applicant will be supplied with the Corporation's terms and conditions and with the necessary application forms.

(a) *Advances to Exporters.* — An advance may be made by the Corporation to an exporter, that is, to a person, firm, corporation or association engaged in the business in the United States of exporting domestic products to foreign countries, provided (a) that the exporter has made a contract or other definite arrangement for the exportation and sale of a domestic product; (b) that the advance will be made only to assist in the exportation of such product; (c) that the advance applied for will not exceed the amount remaining unpaid of the contract price, including insurance and the carrying and transportation charges to the extent only that they are payable in the United States by the exporter to domestic insurers and carriers; (d) that the exporter has been unable to obtain funds on reasonable terms through banking channels.

If the products are not under definite contract of sale, the Corporation must be assured that they will be exported and sold before the maturity of the advance, at a price (including insurance and carrying or transportation charges to the foreign point of destination if and to the extent that such charges are payable in the United States by the exporter to domestic insurers and carriers) at least equal to the amount advanced. In order to insure the performance of this undertaking, the Corporation may require that the value of the commodities shall substantially exceed the amount advanced, and that the application contain appropriate representations and undertakings.

The rate of interest on an advance is fixed at not less than 1 per cent. per annum in excess of the rate of discount for 90-day commercial paper prevailing at the time of such advance at the Federal Reserve Bank of the district in which the borrower is located. The rate in a particular case will be fixed by the Corporation.

The duration of the advance will depend on the nature of the export transaction to be financed, and will in no event extend beyond the day upon which the purchase price is payable. The exporter must agree that if the purchase price is anticipated to any extent he will apply the moneys so received towards the reduction of the Corporation's advance. An advance cannot be made for a longer period than three years from the date of the advance.

(b) *Advances to Banks, Bankers and Trust Companies.* — An advance may be made by the Corporation to a bank, banker or trust company in the United States provided:— (a) That the bank, banker or trust company has made or is making an advance to an exporter for the purpose of assisting in the exportation of domestic products to foreign countries. (b) That the amount applied for does not exceed the amount remaining unpaid of such advance to the exporter.

The rate of interest on such an advance will be determined by the board of directors of the Corporation. The duration of the advance will

depend on the nature of the export transaction to be financed and will not extend beyond the day upon which the loan to the institution is payable. Any moneys paid in anticipation of the expiry date of the loan must be refunded to the Corporation.

§ 6. ADVANCES TO ASSIST
IN CARRYING AGRICULTURAL PRODUCTS FOR EXPORT.

An advance to assist in carrying staple agricultural products in the United States until they are exported may be made by the Corporation as soon as they are properly warehoused or otherwise in a proper condition to afford adequate security for the advance. No such advance can be made later than 1 July 1922.

The conditions regarding the form of obligation, and the security are the same as in the case of advances for the purpose of assisting exportation. So also are the methods of making application; the special conditions attaching to an application by an exporter for an advance to assist exportation attach also to an application by a dealer for an advance to assist in carrying agricultural products.

(a) * *Advances to Dealers and Associations of Producers.* — An advance may be made by the War Finance Corporation to any person, partnership, corporation or association engaged in the United States in dealing in or marketing staple agricultural products, or to any association engaged in producing such products, in order to assist the borrower in carrying such products in the United States until they can be exported or sold for export in an orderly manner. Such an advance can be made whenever the board of directors of the Corporation is of the opinion that as a result of conditions arising out of the war, there exists either (a) an abnormal surplus accumulation of the agricultural product in question, or (b) the lack of an adequate market for such product, or (c) that the ordinary banking facilities are inadequate to enable producers of and dealers in such products to carry them until they can be properly disposed of.

In making advances under this section to dealers or associations the Corporation will require a representation from the borrower that in his judgement he will be able to export the products before the maturation of the advance.

The rate of interest on an advance will be determined by the board of directors and will not exceed 1 ½ per cent in excess of the rate of discount of 90-day commercial paper prevailing at the Federal Reserve Bank of the district in which the borrower is located at the time the advance is made.

Advances may be made for such periods as the Corporation may determine, but not exceeding one year from the date of the advance, and the time of payment can not be extended beyond three years from the date upon which the advance was originally made. Advances must be liquidated before or at the time the agricultural product is exported.

(b) *Advances to Banks, Bankers, or Trust Companies.* — An advance may be made by the Corporation to a bank, banker or trust company under section 22 provided : —

(a) That the advance has been or is being made to a dealer or association of producers, or to individual producers, to assist in carrying staple agricultural products in the United States until they can be exported in an orderly manner.

(b) That the advance does not exceed the amount remaining unpaid of such advances to dealers, associations or producers.

The rate of interest will be determined by the board of directors of the Corporation.

Advances may be made for a period not exceeding one year from the date of the advance, and the time of payment can not be extended beyond three years from the original date of the advance. The advance must be liquidated when the bank receives payment of its advance to the dealer, association or producer.

§ 7. ADVANCES TO INSTITUTIONS

WHICH HAVE MADE ADVANCES FOR AGRICULTURAL PURPOSES.

(a) *Advances to Banks, Bankers or Trust Companies.* — Advances may be made to any bank, banker or trust company which has made advances for any purpose connected with the growing, harvesting, preparation for market and marketing of agricultural products, or the breeding, raising, fattening and marketing of live stock; or if they have discounted or rediscounted agricultural paper. The amount of any advance is limited to the aggregate of all outstanding advances made by the borrower for agricultural purposes, including discounts and rediscounts of agricultural paper.

Advances may be made at any time prior to 1 July 1922, and will mature not later than one year from the date of the advance, and as loans made by the bank mature so must repayment be made to the Corporation, unless special consent has been given for an extension of time of payment. However, the time of payment of an advance can not be extended beyond three years from the original date of the advance.

The rate of interest of an advance will be determined from time to time by the board of directors. Under the law, a bank, banker or trust company obtaining advances on the basis of loans made by it for agricultural purposes may not charge upon such loans a rate of interest greater than 2 per cent in excess of the rate charged by the Corporation. This provision, however, does not authorize a bank, banker or trust company to charge a greater rate of interest than is permitted by State law.

The note or other obligation of the borrower, against which advances are made must be adequately secured in each instance and where drafts accepted by the borrower are tendered, they must be accompanied by an instrument of pledge or other collateral agreement, conferring on the Corporation a valid lien on the security to be pledged.

In exceptional cases the Corporation is authorized to purchase from domestic banks, bankers or trust companies, notes, drafts, bills of exchange or other instruments of indebtedness secured by chattel mortgages, warehouse receipts, bills of lading or other instruments in writing, conveying or securing marketable title to staple agricultural products, including live stock. Such purchases may be made at any time prior to 1 July 1922.

Applications for such sales must prove that the applicant is under some statutory or other legal disability to apply for and obtain an advance pursuant to the provisions of paragraph 1 of section 24 of the Act.

The Corporation will not purchase paper having a maturity at the time of purchase of more than one year, and may not extend the time of payment of any such paper beyond three years from the date upon which it was acquired by the Corporation.

(b) *Advances to Co-operative Associations.* — In order to qualify for advances under section 24 a co-operative association must satisfy the following requirements :

(a) It must be a co-operative marketing association of producers of agriculture products, operating under marketing agreements which confer upon the association unlimited power to sell or pledge the agricultural commodity in question.

(b) It must be organized on a true co-operative basis ; that is all distribution of net proceeds must be made to its members in proportion to the amount of products received from them or marketed for their account. If the association is a capital-stock corporation, ownership of stock should be confined substantially to farmer members, and the dividends upon the capital-stock limited to a reasonable return upon the capital invested, all distribution of proceeds in excess of such reasonable return being made to members in proportion to the amount of products received from them or marketed for their account.

(c) It must be incorporated, either as a stock corporation or as a corporation without capital stock.

A mere credit union, whether or not incorporated, formed for the sole purpose of obtaining loans, and not operating as a marketing association, can not qualify as a co-operative association of producers. If such a credit union, which is incorporated under the laws of a State or of the United States, has resources adequate to the undertaking contemplated, it may qualify as a "financing institution".

A co-operative association may apply for advances provided it has made or will have made corresponding advances for agricultural purposes. The aggregate amount of advances which may be received by such an association from the Corporation may at no time exceed the unpaid advances made by the association.

Expenditures or advances by an association on account of permanent investments in real estate, plant or other fixed assets do not come within the definition of an advance for an agricultural purpose.

Advances may be made at any time prior to 1 July 1922. The maturity of advances will depend upon the requirements of the crop to be finan-

ced and will not extend later than one year from the date of the advance. Any liquidation of the association's advances must be reimbursed at the same time to the Corporation.

The conditions regarding the rate of interest are the same as in the case of advances to banking institutions which have made advances for agricultural purposes.

Advances may be made by the War Finance Corporation against the promissory note or notes of the borrowing association with adequate security in each instance. The form of security may differ according to the requirements of the situation and the financial resources of the borrowing association, but will generally consist on negotiable warehouse receipts or other negotiable documents conferring to the Corporation marketable title to the agricultural products in question. The Corporation may require in addition notes or indorsements of the members of the association, or other additional security. Where the security consists of warehouse receipts, the warehouse in which the products are stored and the form of receipt must be approved by the Corporation, and the Corporation will reserve the right to make, at the expense of the association, periodical inspections of such warehouses.

It is stated that for those co-operative associations which may be unable, under the preceding terms, to qualify for direct advances from the Corporation, arrangements may be made in proper cases by which responsible banks which have made advances to such associations for agricultural purposes may obtain corresponding advances from the Corporation.

The conditions relating to orderly marketing, payment of advances and custody of collateral are substantially the same as in the case of advances to banks, bankers and trust companies.

§ 8. THE ADVANCES MADE.

The following tables give details of the advances made by the War Finance Corporation from 4 January to 30 November 1921, and a summary of the advances made from the date of its establishment to 30 November 1921.

TABLE I. — *Advances Granted for Export and Agricultural Purposes from 4 January to 30 November 1921, Classified according to the Commodities in respect of which they were granted.*

Advances granted to assist exports :

Grain	11,500,000
Tobacco	3,591,370
Cotton	28,422,373
Canned fruits	400,000
Dried fruits	1,259,000
<i>Carried forward . . .</i>	<i>45,163,743</i>

	<i>Brought forward</i> . . .	\$ 45,163,743
Meat products		1,000,000
Condensed milk		1,000,000
Sugar-mill machinery		359,866
Agricultural machinery		500,000
Textile products, sheet steel, copper, railroad equipment.		3,430,466
	Total . . .	51,454,075
Advances granted for agricultural purposes :		
Grain		15,000,000
Cotton		22,492,427
Live stock		12,553,111
Sugar beets		5,010,000
Rice		2,250,000
Canned fruits		300,000
General agricultural purposes		24,417,467
	Total . . .	82,023,005
Total advances granted for export and agricultural purposes .		133,547,215

TABLE II. — *Advances Granted for Export and Agricultural Purposes from 4 January to 30 November 1921, Classified according to the Institution or Persons to which they were Granted.*

To co-operative associations	\$ 52,400,000
To banking and financing institutions	72,447,600
To exporters	8,699,600
Total . . .	133,547,215

TABLE III. — *Summary of Advances made by the War Finance Corporation from the date of its establishment to 30 November 1921.*

	Amounts advanced	Repayments	Amounts outstanding 30 November 1921
	\$	\$	\$
Advances under the war powers of the Corporation	306,720,212	241,251,056	65,469,156
Advances under the Acts of 3 March 1919 and 24 August 1921:			
On exports	74,986,981	31,141,057	43,845,923
For general agricultural and live-stock purposes	33,451,510	106,095	33,345,415
Total . . .	108,438,491	31,247,152	77,191,338
Total advances made . . .	415,158,703	272,498,208	142,660,494

The services rendered by the Corporation, however, cannot be measured by the mere financial statement of its operations. Its very existence with the large funds at its command, has tended to inspire confidence, has opened up other avenues of credit and has facilitated the financing of transactions through the usual channels. In many cases advances authorized by the Corporation have not been consummated because the applicants, strengthened by the assurance of aid from the Corporation, have been able to obtain in other ways the credit facilities which they required. In fact, the experience of the Corporation is stated to have been that wherever it has lent or agreed to lend a dollar it has produced confidence to such an extent that others were willing to lend many dollars.

W. E. H. L.

Miscellaneous Questions relating to Agricultural Economy

ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

GREAT BRITAIN AND IRELAND.

THE MAINTENANCE OF THE AGRICULTURAL LABOUR SUPPLY IN ENGLAND AND WALES DURING THE WAR (*Continued*)

§ 5. WOMEN LANDWORKERS.

Estimates of the number of women employed in agriculture in England and Wales before the War vary so greatly that little reliance can be placed on their accuracy (1). It is certain, however, that the number showed a progressive decline between 1851 and 1901. According to the census taken at different times the number of female farm employees was 143,021 in 1851; 90,249 in 1861; 57,988 in 1871; 40,346 in 1881; 24,150 in 1891, and 12,002 in 1901.

In 1911 the number of women returned as agricultural labourers was 13,245. In addition to these there were 20,027 women returned as farmers or graziers; 56,856 as farmers' or graziers' relatives assisting in the work of the farm; 2,449 as market gardeners, and 2,176 in other classes of agricultural occupations, making a total of 94,722 women engaged in agriculture.

The census having been taken in April many women more or less regularly engaged in agriculture and the very large number who were casually employed were not enumerated. The Census of Production, taken in June 1907, gave very different results. According to this estimate the number of females engaged in agriculture in England and Wales was 244,000, including 144,000 members of occupiers' families, 68,000 other persons permanently employed, and 32,000 persons temporarily employed.

(1) BOARD OF AGRICULTURE AND FISHERIES: REPORT OF SUB-COMMITTEE APPOINTED TO CONSIDER THE EMPLOYMENT OF WOMEN IN AGRICULTURE. London, 1919. — BOARD OF AGRICULTURE AND FISHERIES: WAGES AND CONDITIONS OF EMPLOYMENT IN AGRICULTURE: VOL. I, GENERAL REPORT. London, 1919.

Here there are discrepancies not easily explained. It would seem that in the Census of Population farmers' wives were not included as assisting the farmer, but that in many cases they were so included in the Census of Production. It is also probable that many women who worked more or less in the fields did not return themselves in the Census of Population as employed on farm work.

Obviously exact conclusions cannot be drawn from figures so unreliable. It may, however, be said that comparatively little regular work on the farms was done by women, though they were largely employed on seasonal work. There were some exceptions to this. In Northumberland and other northern counties the decline in the number of women labourers was not so marked as elsewhere. In Wales, where small pastoral holdings are numerous, the women usually took entire charge of milking and dairy work and of the feeding of young stock, while many of the smaller hill farms were run entirely by women, the men being engaged in mining or quarrying (1).

A. *The Need of Women Workers.*

Early in the War it was seen that it would be necessary to induce women to work upon the land in greater numbers. The problem presented itself under two aspects. It was necessary to encourage the village women to give the whole or part of their time to agricultural work in their own neighbourhoods, and, on the other hand, to enlist the services of townswomen for work on the land. We shall see that the village women proved the larger source of labour, but that the townswomen, though less numerous, played a specially important part since by their example and enthusiasm they encouraged the village women to come forward and by their mobility they were particularly useful in meeting sudden emergencies.

In developing the employment of women on the land many difficulties had to be overcome. A complex administrative organization was necessary, and elaborate arrangements had to be made for the training of the women who offered their services. The townswomen and others who were willing to go to any district to which they might be sent were mostly enrolled in a mobile force known as the Women's Land Army. Help was also given by voluntary associations such as the Women's National Land Service Corps.

B. *The Difficulties to be Overcome.*

There existed in the minds of rural women the idea that work on the land was degrading and this prejudice had to be eradicated before they could be induced to offer their services. It was by the example of educated women who took up farm work out of patriotism or of townswomen

(1) ROBERTS (Mrs. M. Silyn): *The Women of Wales and Agriculture. Journal of the Board of Agriculture*, October 1918.

who did not feel the same prejudice, by persistent propaganda and by the women's growing sense of the national danger that this difficulty was eventually overcome (1). The whole attitude of country women towards employment on the land became changed and those who had always shared in the work of the farm came to take a new pride in their occupation (2).

Even more formidable was the prejudice of the farmers against women labourers (3). This was partly overcome by systematic propaganda, by demonstrations of women's work, and by published accounts of what women had accomplished (4), but it was finally removed when the women proved themselves thoroughly efficient in many branches of agricultural work. It may be noted that the farmers' prejudice was less strong against the village women, even if unskilled, than against the imported women labourers (5).

Another difficulty arose from the fluctuating nature of the demand for women's labour (6). Apart from variations due to the weather and to the seasons, there was great uncertainty as to the extent to which the farmers could rely upon other sources of labour, such as soldiers released for work on the land, or prisoners of war. The demands of the Army, too, varied according to the condition of affairs at the Front and the attitude of the Tribunals towards the agricultural labourers who still remained on the land was consequently uncertain.

In regard to the mobile labourers, the difficulty of finding accommodation was a serious one (7). We shall see what steps were taken to meet it, but the difficulty was never completely overcome.

A difficulty affecting the village women was that many of them were unable to work on the land until provision was made for taking care of their children (8). Others were prevented from offering their services by want of suitable clothing (9).

C. The Administrative Organization.

It was only gradually that an administrative organization arose in connection with women's labour on the land.

In 1915 women's county committees, working either in co-operation

(1) ERNLE (Lord): *The Women's Land Army. Nineteenth Century and After*, January 1920. — TALBOT (Miss Meriel L.): *Woman in Agriculture during War-time. Journal of the Board of Agriculture*, October 1918.

(2) ROBERTS (Mrs. M. Silyn): Article cited in note (1), page 313.

(3) Articles by Lord ERNLE and by Miss Meriel L. TALBOT cited in note (1).

(4) From December 1915 to November 1918 the *Journal of the Board of Agriculture* contained information in every issue regarding the work which women were doing on the land.

(5) ERNLE (Lord): Article cited in note (1).

(6) ERNLE (Lord): Article cited in note (1). — LYTTELTON (The Hon. Mrs. Alfred): *The Women's Land Army. Journal of the Board of Agriculture*, October 1918.

(7) ERNLE (Lord): Article cited in note (1).

(8) *Journal of the Board of Agriculture*, May 1916.

(9) ERNLE (Lord): Article cited in note (1).

with or as sub-committees of the County War Agricultural Committees were formed in many counties to carry on propagandist work with a view to inducing women to enrol themselves for farm work for whole or part time (1). Early in 1916 it was noted that such committees had already been formed in 25 counties.

In Cornwall women's committees were formed in each parish, the members of which were to make a canvass of the women of the parish, to compile a register of women willing to work on the land and to make provision for their training by local instructresses (2). The system of village registers was recommended by the Labour Exchange Department of the Board of Trade for general adoption in August 1915 (3).

In February 1916 the Board of Agriculture urged the formation in every county of a Women's Farm Labour Committee, with local subcommittees, working in concert with the War Agricultural Committees, but carrying on its campaign with its own staff and organization (4).

The system recommended was that when a Women's Farm Labour Committee had been set up, it should appoint District Committees or Local Representatives and Village Registrars with a view to undertaking a systematic canvass of the women of the county and the formation of a register of those women who were willing to offer their services. It was suggested that the War Agricultural Committee should delegate to the Women's Farm Labour Committee all questions relating to women's work on the land, and that two or more members of each committee should be co-opted on the other committee. A similar method might be adopted to co-ordinate the work of the District War Agricultural Committees and of the Women's Farm Labour Sub-Committees.

One of the duties of the Women's Committees was to arrange for holding meetings for the purpose of inviting and encouraging women to work on the land. A panel of approved women speakers was drawn up by the Board of Agriculture.

Early in 1916, too, the Board of Trade increased the number of organizers of women's work attached to the Labour Exchanges.

In January 1917 a Women's Branch of the Board of Agriculture was formed. Two months later it was more fully organized and became a section of the Food Production Department (5). It was made responsible for the selection, training and placing of the women who volunteered

(1) *Journal of the Board of Agriculture*, February 1916.

(2) *Journal of the Board of Agriculture*, December 1915.

(3) Notes on war service for country-women issued by the Labour Exchange Department of the Board of Trade (*Journal of the Board of Agriculture*, August 1915).

(4) Circular Letter, dated 23 February 1916, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, March 1916).

(5) Circular Letter, dated 30 March 1917, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, May 1917).

for the Women's Land Army. To ensure efficient organization for the work, the Women's War Agricultural Committee in each county was asked to set up an Executive Committee with the following Sub-Committees:

(1) A County Selection and Allocation Committee with subsidiary Committees in the County Districts.

(2) An Instruction and Depot Committee.

(3) A Finance Committee.

(4) A Wages Committee.

The County Selection and Allocation Committee was expected to co-operate in the closest way with the Employment Exchanges; to select the National Service and other volunteers, arranging for their medical inspection and the provision of their outfit, and for placing them, through the County Instruction and Depot Committee into Training Centres, or straight on a farm with the Government allowance of 15s a week for three weeks, paid to them while they were being instructed in their work by the farmer who afterwards employed them; to inspect the posts and arrange accommodation.

The Instruction and Depot Committee was to arrange for the training of the volunteers in various ways, in Agricultural Colleges and in Training Centres. It was also to organize a Depot to which the land workers could be sent if they were out of employment through no fault of their own. The outfit might in some cases be stored at the Depot; in other cases, a storeroom under the management of voluntary workers might be arranged.

The Finance Committee and its Treasurer (who required to be approved by the Board of Agriculture) were to make arrangements for the disbursements of such Government money as had been assigned to the use of the Women's War Agricultural Committee.

The Wages Committee was to decide upon the fair current rate of wages for different types of work in the county. It was considered important that representatives of the War Agricultural Committee should join this Committee.

The existing organization in the different counties, whereby District Representatives and Village Registrars had been appointed was to be strengthened.

Twelve Travelling Inspectors were appointed for England and Wales and in each county there was a paid Organizing Secretary, for whose work the Travelling Inspector was responsible.

This scheme of organization was completed by the appointment of Welfare Committees to look after the well-being of the workers.

To meet the sudden demands for additional labour which occur at certain seasons, a Seasonal Labour Committee was set up by the Women's Branch of the Board of Agriculture (1). The Women's National Land Service Corps, of which we will speak later, was appointed as agent of the

(1) ERNLE (Lord) : Article cited in note (1), page 313.

Board of Agriculture for the supply of seasonal workers, and in 1918 enrolled 3,000 women from the Universities and elsewhere to work in the flax-pulling camps in Somerset, Northamptonshire and other counties (1).

D. Village Women.

We have seen that the reluctance of the village women to work on the land was gradually overcome. Comparatively few of them, however, were able to give their whole time to the work. To simplify the organization of the part-time workers, use was made of group-leaders and forewomen (2). The group-leaders organized groups of part-time village women, went out with them at the start and, when moving to another centre left behind them a forewoman chosen from among the village workers. The forewomen arranged the time and pay sheets for their groups and paid the women their wages (3). A development of this system occurred later. In April 1918 a special appeal was issued for women with agricultural experience to act as "village forewomen" to lead and arrange the work of gangs of women on the land (4). They were to enrol in the Women's Land Army for six months and to be prepared to work wherever they were required throughout England and Wales.

To enable married women to work in the fields arrangements were sometimes made whereby other persons, not themselves able to do agricultural work, would look after their children in their absence. In some cases crèches were established for the children of married workers. In this the War Agricultural Committee of the Holland Division of Lincolnshire took the lead (5). Thus at Holbeach an unfurnished house was hired and furnished partly by gifts of furniture and partly by a fund of £25 collected from local farmers. Accommodation was provided for thirty children, preference being given to infants if applications were in excess of that number. The charges for taking in and feeding children were 6d. per day for an infant up to three years old and 4d. per day each for a second and third child.

In other cases women who could not themselves undertake farm work relieved the workers of part of their home duties by mending the family's clothes, by cooking the dinner, etc (6).

The village women would have come forward in greater numbers if they could have provided themselves with suitable clothes and foot-

(1) TALBOT (Miss Meriel L.): Article cited in note (1), page 314. — *Journal of the Board of Agriculture*, July 1919.

(2) Circular Letter, dated 30 March 1917, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, May 1917).

(3) EBNLE (Lord): Article cited in note (1), page 314.

(4) Notice issued by the Food Production Department of the Board of Agriculture in April 1918 (*Journal of the Board of Agriculture*, May 1918).

(5) *Journal of the Board of Agriculture*, May 1916.

(6) *Journal of the Board of Agriculture*, December 1915.

wear (1). This obstacle was partly overcome by arrangements made in the Spring of 1916 by the Board of Agriculture with the Co-operative Wholesale Society for the supply of suitable clothing to Women's Committees at the lowest wholesale terms (2). At the end of 1916, in view of the increasing shortage of labour, the Co-operative Wholesale Society found it necessary to notify the Board of Agriculture that it would not be possible for them to continue their arrangements for the supply of clothing (3). Arrangements were, however, subsequently made by the Women's Branch of the Board of Agriculture whereby they were able to sell clothing at cost price to women who, for a certain period, had worked on the land for 24 hours a week (4). They also sold boots to land workers at wholesale prices, and allowed a bonus of 5s. a pair to women who fulfilled the same conditions.

In spite of all the difficulties the numbers of women employed upon the land as part-time workers was more than trebled. It was estimated that in September 1918 at least 300,000 such women were at work (5).

In recognition of their patriotic spirit, the Board of Agriculture, in conjunction with the Board of Trade, proposed early in 1916 to grant a certificate, emblazoned with the Royal Arms, to women land workers (6).

It was afterwards decided that an armlet of green baize bearing a red crown might, in the discretion of the County Women's War Agricultural Committees, be issued to any woman or girl over school-leaving age who had actually worked on the land for not less than 30 days or 240 hours (7). The distribution of the armlets was entrusted to the District Representatives of the County Women's War Agricultural Committees, who as a rule, issued them through the Village Registrars. Any woman who had qualified for an armlet was also entitled to receive a certificate, signed by the Presidents of the Board of Trade and the Board of Agriculture, bearing the Royal Arms emblazoned in colours (8).

E. *The Women's Land Army.*

In January 1917 it was decided to form a mobile Land Army consisting of women who were prepared to give their whole time and to go anywhere or undertake any agricultural work at the direction of the Board of Agriculture (9). The first appeal to women to join the Land Army was issued in March by the National Service Department and 45,000 women responded to the appeal.

(1) ERNLE (Lord): Article cited in note (1), page 314.

(2) *Journal of the Board of Agriculture*, April 1916.

(3) *Journal of the Board of Agriculture*, January 1917.

(4) ERNLE (Lord): Article cited in note (1), page 314.

(5) ERNLE (Lord): Article cited in note (1), page 314.

(6) Circular letter, dated 23 February 1916, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, March 1916).

(7) *Journal of the Board of Agriculture*, January 1917.

(8) For the badges and awards of merit given to Land Army women see page 321.

(9) ERNLE (Lord): Article cited in note (1), page 314.

At first the women were recruited by the National Service Department and handed over for selection, training, equipping and placing to the Women's Branch of the Food Production Department (1). The entire organization of the Women's Land Army was afterwards entrusted to that Department and it was through the Women's Committees in each county, in consultation with the Employment Exchanges, that the work was carried out.

In the autumn of 1917 an arrangement was made whereby, to prevent overlapping, women recruited for work under the Forage Committee of the War Office and under the Timber Supply Department of the Board of Trade were included in the Land Army (2). Recruits were accepted for any of the three sections of the Land Army, but were to agree to be transferred to either of the other sections if the national interest required it. Enrolment was for one year (Class A) or for six months (Class B), except for the Forage Section, which was only for one year. Women who had already enrolled for the period of the War in the Land Army could, if they so desired, be enrolled under the new scheme for one year.

During the first few months after the formation of the Land Army the women met with considerable discouragement, through the prejudice of the farmers and the uncertain demand for their labour (3). The demand, however, increased after the summer of 1917 and the women found the opportunity to prove their utility. The need for Land Army women was most strongly felt after the call-up of men in the months from April to June 1918. During these months a recruiting campaign was vigorously pushed in the provinces as well as in London and met with great success. Over 28,000 volunteers offered themselves as a result of this campaign (4).

In September of the same year, 16,000 Land Army women were at work, and this was the highest figure which was reached at any one time (5).

Besides working continuously on farms, the Land Army women were called upon to meet sudden demands for seasonal labour and on account of their mobility they often proved themselves exceedingly valuable in difficult circumstances.

Recruiting and Selection. — The method of recruiting and selecting women for the Land Army was as follows (6): Forms of application were obtainable at any post office. On signing one of these, a woman received a summons from the nearest Employment Exchange to appear before a joint committee of the Employment Exchange and the District Selection and Allocation Committee of the Women's War Agricultural Committee. Her railway ticket to the place indicated was sent to her.

(1) *Journal of the Board of Agriculture*, October 1917.

(2) *Journal of the Board of Agriculture*, October 1917 and February 1918.

(3) ERNLE (Lord): Article cited in note (1), page 314.

(4) *Journal of the Board of Agriculture*, June and July 1918.

(5) ERNLE (Lord): Article cited in note (1), page 314.

She was interviewed by the District Selection and Allocation Committee who considered whether she was physically fit for work on the land. If she were accepted for service the Committee then decided (a) that she was sufficiently skilled to go straight to a farm as a paid worker, or (b) that she was suitable to receive a bursary (15s. a week) and to be allocated direct to the approved farm on which she was to work, or (c) that she required four weeks' training at a centre.

The recruit was then given a medical certificate, which she was to have filled in, either by her own doctor at her own expense or by one of the doctors on the Committee's panel. She was also given a measurement form for her equipment to fill in at once. She was then given her return railway ticket and told to await further orders.

If the recruit was passed by the doctor as fit for land work, the Committee carried out the decision arrived at during the interview. The medical examination to which the volunteers were subjected was severe, as it was necessary to maintain a high standard of fitness and health. Of the women who responded to the first appeal, 50 per cent. were rejected (1).

When a recruit was to be sent to a training centre she received her instructions and a railway voucher from the Women's War Agricultural Committee, to whom all particulars were furnished by the District Committee. Her progress was reported upon and, if it were satisfactory, arrangements were made to place her upon a farm as soon as she was ready.

Billeting. — Through the women's organization set up in every county suitable billets were found for Land Army girls sent to any district. The local rate of payment was ascertained and every care was taken to ensure the well-being of the land workers (2).

The compulsory powers of the Board of Agriculture in regard to billeting were very sparingly used, as it was thought that the landworkers would not be likely to be made comfortable in billets compulsorily obtained (3). In one county accommodation was obtained by compulsion for the women employed in threshing. In some cases camps were formed for the women landworkers or they were conveyed by lorries from convenient centres. At times the accommodation provided was extremely rough and the women endured considerable hardship.

All billets, as well as training centres and hostels, were periodically inspected by official organizers and inspectors.

Outfit. — The outfit of Land Army women consisted of two overalls, one hat, one pair of breeches, one pair of boots, one pair of leggings, one jersey, one pair of clogs and one mackintosh (4). A second issue was made within the year of one overall, one hat, one pair of breeches, one pair of

(1) ERNLE (Lord): Article cited in note (1), page 314.

(2) Notice issued by the Food Production Department of the Board of Agriculture (*Journal of the Board of Agriculture*, April 1918).

(3) ERNLE (Lord): Article cited in note (1), page 314.

(4) ERNLE (Lord): Article cited in note (1), page 314.

boots and one pair of leggings. The value of a year's outfit was estimated at £7. It was obtained from the War Office Contracts Department and distributed to the workers in each area through the Outfit Secretary and Store Superintendent (both voluntary) of the County Committees.

Wages. — At the outset a commencing wage of 18s. a week and a minimum of 20s. per week after passing an efficiency test was guaranteed to women of the Land Army. In March 1918 the commencing wage was increased to 20s. a week and the minimum wage after passing an efficiency test to 22s. a week (1).

As from 28 April 1919 the commencing wage for women of the Land Army was raised by 2s. 6d. a week (2). They were to receive 22s. 6d. for the first three months' agricultural work, which included the period of training, and afterwards 25s. a week as the minimum wage. If, however, a higher figure had been fixed by the Agricultural Wages Board as the minimum wage for women doing the same class of work, the Land Army women were to be paid at that rate.

To these wages must be added the value of the benefits offered by the Government to Land Army women, such as free outfit, free instruction, railway and travelling expenses in connection with employment and maintenance at a hostel while out of employment (3).

Badges and Awards of Merit. — Women enrolling themselves in the Land Army for a year were given a service armband after 30 days' or 240 hours' work on the land, a stripe for every six month's work, and a badge after two months' approved service (4).

Two awards of merit were inaugurated in the Land Army on 5 October 1918 (5). The first was the Good Service Ribbon, which was awarded to all workers who had given six months' completely satisfactory service, both in and out of working hours. Of these ribbons 7,976 had been awarded up to October 1919.

The second was the Distinguished Service Bar, which was given for acts of courage and unselfish devotion in the service of others and also for special skill in the course of their employment. Up to October 1919, 46 Bars were awarded, and of these 24 were given for deeds of splendid courage and endurance, while 22 were awarded for really exceptional skill in such unaccustomed work as rearing bulls, driving tractors and shepherding. Ten Distinguished Service Bars were awarded to women

(1) Circular Letter, dated 4 March 1918, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, March 1918).

(2) Notice issued by the Food Production Department of the Board of Agriculture, 14 March 1919. (*Journal of the Board of Agriculture*, April 1919).

(3) ERMLE (Lord) : Article cited in note (1), page 314. — Circular Letter, dated 30 March 1917, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, May 1917).

(4) *Journal of the Board of Agriculture*, February 1918.

(5) *Journal of the Board of Agriculture*, October 1919.

in the tractor service, so that, though only two per cent. of the Land Army, they took 25 per cent. of these honours (1).

The Demobilization of the Land Army. — Demobilization of the Land Army went on gradually after the armistice (2). In the winter of 1918-19 many women withdrew from it. In October 1919 only 8,000 women remained, and it was decided to disband the Land Army on 30 November, by which time the potato harvest would be gathered in. The disbanded women were, however, encouraged to remain on the land, as their labour was permanently required. It was estimated that of those who were still enrolled at the time the Land Army was disbanded about 75 per cent. wished to continue to do farm work. In Surrey, for example, out of 299 Land Army women, only 44 returned to their pre-War life.

At the time of the disbanding of the Land Army a self-governing association, called the National Association of Landswomen was formed to bind together all women workers on the land. This association was to endeavour to provide, at the expense of the workers themselves, the advantages which the official organization had secured (3).

F. *The Training of Women Workers.*

One of the greatest difficulties in increasing the supply of women landworkers was the provision of the necessary training. Even in normal times the facilities offered to women were wholly inadequate, as was recognized by the Agricultural Education Conference in its Report on Agricultural Education for Women, opportunely published in November 1915 (4).

When it was realized that it would be necessary for women to take their share in agriculture, a few patriotic women, chiefly of the educated class, set themselves to obtain such training or experience as would enable them to be of some use on the land (5). They became students for short terms at such of the Agricultural Colleges and Schools as were able to accommodate them or arranged with individual farmers to get practice on

(1) *Journal of the Board of Agriculture*, December 1919.

(2) *Journal of the Board of Agriculture*, October 1919. — ERNLE (Lord): Article cited in note (1), page 314.

(3) *Journal of the Board of Agriculture*, December 1919. — ERNLE (Lord): Article cited in note (1), page 314.

(4) REPORT OF THE AGRICULTURAL EDUCATION CONFERENCE ON AGRICULTURAL EDUCATION FOR WOMEN. London, 1915. — In June 1910, the Rural Education Conference was constituted by the Board of Agriculture and the Board of Education for a term of three years. This period having expired, the Conference was reconstituted by the Board of Agriculture under the name of the Agricultural Education Conference (See *Journal of the Board of Agriculture*, October 1914). Before the outbreak of the War the Board referred to the Conference the question of agricultural education for women. A summary of its Report on this question was given in the *Journal of the Board of Agriculture* of December 1915.

(5) MACQUEEN (Miss M. M.): *The Training of Women on the Land. Journal of the Board of Agriculture*, October 1918.

the farms. These women usually paid for their own training or worked without wages until they were competent. Other women obtained by similar methods a training in horticulture.

During 1915 a training centre was established on a farm in Essex by the Women's Farm and Garden Union. Instruction in all forms of farm work was given for a period of 12 weeks. The students usually paid for their maintenance, but the Union paid for the instruction. The women thus trained quickly found employment, many of them obtaining responsible positions.

In a Notice issued by the Labour Exchange Department of the Board of Trade in August 1915 stating that women were required for agricultural work it was suggested that the necessary training in milking and dairying should be given by farmers who intended to employ the trained women on their own farms (1). It was also stated that there were a few agricultural colleges and private farms where a short course of training could be obtained on payment of a fee, the cost being usually about £1 per week for instruction, board and lodging. In many counties there were travelling dairy schools which provided short courses of instruction, usually extending over about ten days, while a few County Education Authorities were arranging special short courses of training with a view to preparing women for light farm work. The Board of Agriculture had arranged for a limited number of courses of training extending over two to four weeks to be given at certain Agricultural Colleges; in these courses maintenance was provided and no cost was involved for the women under training.

In November 1915 the President of the Board of Agriculture addressed a Circular Letter on the training of women for work on the land to the War Agricultural Committees (2). He stated that the experiments which had been made in a few counties since the outbreak of the War had proved that it was possible, by providing selected women with short courses of training, to make an appreciable addition to the number of available farm workers. In a Memorandum which accompanied the letter these experiments were described.

The objects aimed at were (a) in the case of women entirely unacquainted with agriculture, to give them an opportunity of becoming familiar with farm work and thereby gaining some confidence in themselves before seeking employment as wage-earners, and (b) in the case of women already familiar with farm work, to provide them with opportunities of extending their knowledge and increasing their efficiency. To meet these objects three methods had been tried.

In Cornwall the women's committees which were formed in each parish selected a number of capable women competent to act as instructresses. These local instructresses held classes in such subjects as milking, the preparation of cattle foods and feeding calves, pigs and dairy cattle. More

(1) Notes on agricultural work and training for women issued by the Board of Trade (Labour Exchange Department) (*Journal of the Board of Agriculture*, August 1915).

(2) *Journal of the Board of Agriculture*, December 1915.

advanced instruction in dairy work was undertaken, if required, by the regular County Staff Instructresses. Classes by the local instructresses were also held in other branches of farm work, such as hoeing roots, harvesting hay and corn, lifting potatoes, weeding and gardening.

The usual arrangements were for a farmer who had an efficient dairy woman to place her and the required number of cows at the disposal of the parish committee. Similarly, a farmer would allow a competent woman to hold a class in turnip hoeing, or any other branch of light farm work, on his land. The farmer was required to continue to pay the instructress her regular wage and she received, in addition, sixpence a day from county funds. In this way the number of women capable of working on the land was increased at very little cost to public funds.

In Nottinghamshire a different scheme was adopted. The Nottingham County Council Advisory Labour Committee arranged for eight women to be housed at a farm-house in the county. The farmer allowed his farm to be used for the purpose free of rent, and gave a donation and weekly subscription towards general expenses. The women were selected by the Labour Exchanges from a large number of applicants and the course of training lasted three weeks. Two courses were held. Four of the women worked on the central farm and four on two neighbouring farms. The farmers in each case arranged for the instruction to be given, and gave the women their breakfast and dinner in return for the work done. The voluntary services of a matron superintendent were obtained to supervise the working of the scheme and the assistance of the County Agricultural Organizer and the Instructor in Agricultural Processes were also secured.

The pupils were given instruction in milking both in the morning and in the afternoon, and they also assisted with calves, pigs and poultry, hay-making, root singling and hoeing, top dressing with artificials, cleaning and whitewashing cowsheds, gardening and pea picking. The course of instruction was too short to give a thorough training to the pupils, but it enabled them to become accustomed to rural life and conditions and gave the Labour Exchanges an opportunity of judging of their ability to take situations which farmers had applied to them to fill.

The third scheme was that carried out by the Board of Agriculture. The Board arranged with the Labour Exchanges and certain Agricultural Colleges and Farm Schools, situated in different parts of England and Wales for the training of a number of young women who were willing to accept employment as milkers and to undertake light farm work. The Board undertook the payment of the pupils' travelling expenses as well as of their board, lodging and tuition at the institution. The women were selected by the Labour Exchanges, who undertook to place the women out on farms on completion of their training.

The scheme was in operation for 25 weeks and the women selected were in nearly every case without previous experience of agricultural work. The length of the course varied from two to four weeks. In all, 218 women were passed through the course of training and of these 199 were placed in employment. A few unsuitable women were selected and the two-

weeks' course was too short, but, as an experiment, the scheme was successful. The wages received by women trained under the scheme varied from 5s. to 10s. weekly when board and lodging were provided, or from 14s. to 20s. weekly when they lived out, cottages and perquisites being provided in some cases.

As a result of the Circular issued by the President of the Board of Agriculture the instruction of women in light farm work and in milking was quickly organized in a considerable number of counties. The systems adopted were various. In some counties, training was given at approved farms; the shortest period for which training was given was from two to four weeks in Bedfordshire and Herefordshire; the longest period was 12 weeks in West Sussex. In other counties courses of instruction for women were opened at Agricultural Colleges and Farm Schools, this being facilitated by the fact that the number of men students was greatly reduced. In other counties special training centres were established. In others, again, classes were organized in the different villages, as had been done in Cornwall (1).

In the autumn of 1916 the Board of Agriculture offered to Local Education Authorities grants equal to two thirds of any expenditure they incurred in the training of women land workers (2). A number of scholarships of the value of £4 were also awarded providing for a four weeks' course of instruction at certain recognized institutions. Such scholarships were granted to applicants who were approved by the Women's War Agricultural Committee and undertook to give a stated period of service on the land after training. Advantage was taken of the scholarships by several of the voluntary organizations which helped to enlist the services of women workers and by individual women who desired to make themselves more efficient. It was particularly advantageous to women who were already occupied on the land but were compelled to take up unaccustomed tasks owing to the withdrawal of the men.

The short courses of instruction served to give the women some notion of the use of farm implements and the care of young stock, but their training had necessarily to be completed by experience. They were usually quick to learn, as they had not only grit and determination, but a freshness of mind which the farm labourer had largely lost (3).

In 1916, as an outcome of the experiment made by the Women's Farm and Garden Union in the training of educated women, the Women's National Land Service Corps was formed, primarily for the purpose of training educated women to act as forewomen in charge of gangs of women

(1) For a summary of the provision made for instruction in 35 of the administrative counties in England and Wales, see the issue of June 1916 of the *Journal of the Board of Agriculture*. In the issue of July 1916, a full account was given of a training centre established in the Lindsey Division of Lincolnshire, and in the issue of December 1916 notes were published on two training centres formed in Nottinghamshire and a centre formed in Hertfordshire.

(2) MACQUEEN (Miss M. M.): Article cited in note (5), page 322.

(3) TALBOT (Miss Meriel L.): Article cited in note (1), page 314.

workers on the land. The Government gave a grant to the Corps proportionate to the sums raised from voluntary subscriptions (1).

Arrangements for the training of the women joining the Corps were made by the Women's Farm and Garden Union, to whom various farms were lent for the purpose by different members (2). Facilities were also offered by certain Agricultural Colleges and Farm Institutes. The training was always for six weeks and was directed to making competent cow-women or horse-women of the members of the Corps. Most of the women who were enrolled paid for their own maintenance while training, but a certain number of free trainings were given, the expense being met by subscriptions to the Corps.

The methods whereby the Land Army recruits were trained were as follows (3):

1. Training under the bursary systems.
2. Training at a practice farm.
3. Training at an organized centre.

Under the bursary system the recruit was sent direct to the farmer who was to employ her. In consideration of training her for the work for which he required her, the farmer was allowed to have the recruit for three weeks without paying her any wages. During this period the Land Army made an allowance for her maintenance.

This system had the disadvantage that in many cases the farmer only trained the recruit for one particular process and when the season for that process was over she required further training before she was of much use to another employer.

Under the practice farm system the farmer undertook to train one, two or more women for four to six weeks. In return for the training he had the benefit of the women's labour, the Land Army giving them maintenance. The farmer did not employ the women he had trained, who were transferred to paid employment on other farms, but other recruits were sent to him to train.

The practice farm system was not uniformly successful. Its success depended upon the farmers' skill in imparting instruction and upon his ability to gauge the amount of work which a recruit was capable of doing. Moreover in certain classes of work it was very necessary that close supervision should be given until the recruit reached a fair degree of efficiency and the farmer had not always time to give this supervision.

The third method was, on the whole, the most satisfactory. The recruits were sent to a central hostel, usually established on a farm where there were adequate facilities for training a large number of recruits,

(1) Circular Letter, dated 23 February 1916, addressed by the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, March 1916).

(2) MACQUEEN (Miss M. M.): Article cited in note (5), page 322.

(3) The account which follows is in the main a summary of part of the article by Miss M. M. MACQUEEN on "The Training of Women on the Land," to which we are also indebted for much of the information already given on the training of women landworkers.

or in the centre of a district in which there were several farms suitable for training. The hostel was under the supervision of an instructress, who was able to give her whole attention to the work of training.

At first the period of training was restricted to four weeks, but this was found to be insufficient and the period was extended to six weeks with marked results. It was found that the last two weeks of training greatly increased the efficiency of the recruit. At the same time "efficiency tests" were instituted.

In the majority of cases the training was given in stock or horse work, though there were exceptions to this rule as in some counties the general farm labourer was most in request.

It was found necessary to supplement the training with certain special subjects, such as thatching, hedging, etc. For such training special classes were usually held in connection with the training centre or, where the training was being given to women already in employment, at some central place where the women could meet after their working hours.

Special centres were also arranged for the instruction of women tractor drivers. These were similar to the ordinary training centres, the instruction being given specially in the management of the tractors and of the various implements attached to them, and in the general work of cultivation. When the demand for women drivers increased, recruits were placed for work and training under skilled operators. The period of training was from four to six weeks.

Some of the Land Army recruits received a short training in gardening and were afterwards employed by market gardeners.

During the winter of 1917-18 short courses of instruction in the planting of forest trees were given in the Forest of Dean by the Office of Woods, with the object of securing a number of forewomen capable of dealing with the gangs of women labour working at afforestation.

In making arrangements for the training of the Land Army, some difficulty was caused by the fluctuating demand for women's labour, which made it necessary to have a larger number of women in training at one time than at another. In the Spring of 1918, the number of women in training was between 300 and 400; in the July following the number had risen to 2,775. Between March 1917 and May 1919, some 23,000 women passed through the training centres (1).

G. The Kinds of Farm Work done by Women.

In the first appeals to women to offer their services for work on the land, they were asked to undertake "light farm work," but it is remarkable how, as time went on, women more and more undertook the heaviest forms of labour. There was, moreover, a steady increase in their efficiency.

(1) ERNLB (Lord) : Article cited in note (1), page 314.

As early as October 1917 a Test Meeting for women land workers of the midland counties was held at Edgbaston (1). About 250 women farm workers entered for the Tests. The candidates were divided into three classes of workers, according as they had worked for twelve months or more on a farm, for six months, or for three months. The Schedule was drawn up with a view to testing the general capacity of candidates for all-round farm work, as well as for special branches, such as those of the wagoner and the cowman.

Although 75 marks out of a possible 100 were necessary to secure an efficiency certificate and 70 per cent. for a highly commended certificate, in the milking tests not a single candidate failed. The results in regard to forms of labour usually regarded as less suited to women labour were almost equally striking. Besides milking by hand and by machinery, the tests included pulling, cleaning and piling roots; hoeing and singling roots; trussing; thatching; loading and unloading; mowing by hand; grooming, harnessing and driving; ploughing; ridging; drilling; motor-tractor driving. The proportion of women who failed in the tests was very small.

The work of tractor ploughing by women was started in the autumn of 1917, when farmers were strongly of opinion that women were quite unsuited to the task (2). To meet these objections great care was taken in the selection and in the medical examination of recruits, while preference was given, where possible, to educated women. The number of women selected to receive training was 415 and of these 400 were actually employed.

The experiment of employing women threshers was also tried for the first time in the autumn of 1917, when gangs were sent out to Lancashire, Leicestershire and Nottinghamshire, where they did good work (3). In the following year a larger scheme was started and gangs of women threshers were employed in Kent, Essex, Warwickshire, Staffordshire, Yorkshire, Glamorgan and other counties. The women were housed in permanent billets and went out to their work every day. The gangs consisted as a rule of four Land Army women and a forewoman, and wages averaged 23s. per week. The work was of an arduous nature and trying in many ways, and only the strongest women were chosen for it. Some of the women improvised masks of muslin or light canvas as a protection from dust and smoke.

In August 1918 returns were obtained regarding the occupations of 12,657 women of the Land Army and it was found that 5,734 were employed as milkers, 293 as tractor-drivers, 3,971 as field-workers, 635 as carters, 260 as ploughmen, 84 as thatchers, and 21 as shepherds, while the remainder were occupied in various other kinds of agricultural work (4).

(1) *Journal of the Board of Agriculture*, September, October and November 1917.

(2) *Journal of the Board of Agriculture*, December 1919.

(3) *Journal of the Board of Agriculture*, October 1918.

(4) ERNLE (Lord): Article cited in note (1), page 314.

Writing in the Autumn of 1918 Miss Meriel L. Talbot stated that in milking and dairy work, the care of young stock, certain kinds of field work and the lighter kinds of forestry women proved themselves completely efficient (1). The work of women in such occupations as threshing, thatching, and driving motor tractors was also remarkably successful, but in the heavier and more monotonous kinds of work the landswoman was not so successful. Manual work of this kind, without variety or change, tended to weary her physically and mentally. She was more adapted for those kinds of work which require knack, deftness of hands and personal interest and care.

Lord Ernle, writing in the light of a year's further experience, gave an estimate of the work for which women are best adapted which did not differ greatly from that of Miss Talbot (2). He said that experience showed that there were particular branches of agriculture for which women had special aptitudes. First among these were the handling of live-stock and above all, dairying and the rearing of young animals. In dealing with horses, their light hands compensated for any want of strength. They excelled in milking and dairy work, for the standard of cleanliness which they introduced was a valuable asset. A woman's secret with animals seemed to be that to her they were not machines but individuals. In the lighter branches of field-work and of forestry women did admirable work. On market gardens their services were invaluable. In thatching, which was fast becoming a rare agricultural art, they proved most proficient. In driving motor-tractors they did at least as well as men; here also light hands tell.

There were other kinds of work in which some women had completely succeeded, though more exceptional qualities were needed. Here and there a woman proved herself to be a competent ploughman, but on heavy land it was doubtful whether ploughing was a suitable occupation for women. In the dearth of male labour threshing was undertaken by women. They did it well, but it was a dirty and heavy job, and the provision of accommodation was always a difficulty. Whether women generally were fitted to become shepherds was still doubtful, yet during the War women did wonders among the sheep.

In some counties, as for example in Monmouthshire (3) and in Devonshire (4), derelict farms were given over by the County War Agricultural Committees to the Women's Committees to be cultivated entirely by women's labour.

(1) TALBOT (Miss Meriel L.): Article cited in note (1), page 314.

(2) ERNLE (Lord): Article cited in note (1), page 314.

(3) ROBERTS (Mrs. M. Silyn): Article cited in note (1), page 313.

(4) HAMLYN (Miss S. C.): A Woman's Farm in Devon. *Journal of the Board of Agriculture*, October 1918.

§ 6. SOME OTHER SOURCES OF LABOUR.

A. Belgian Refugees.

A few of the Belgian refugees found occupation on the land in England and Wales, but the number was not as large as might have been expected. At the date when the Government Belgian Refugees Committee issued its first Report (1) 100,000 refugees had arrived in England and the vocations of 23,907 of these had been accurately classified; only 654 had been engaged in their own country in an agricultural occupation. At this time, too, though the shortage of labour in agriculture was already evident, there was some hesitation about employing Belgian refugees lest it should be to the detriment of British labour.

B. Danish Labourers.

In March 1916 the Central Labour Exchange Department of the Board of Trade undertook to try to obtain Danish labour for work on farms in England and Wales which were outside the prohibited areas, provided they were assured that engagements for not less than 12 months could be guaranteed, and that third class travelling expenses of the men from Denmark would be advanced by the farmers on the understanding that such advances might be recouped by deductions from wages (2).

The men were to be mainly young single men between the ages of 18 and 25, who had had practical agricultural experience, especially in dairy farming, and who had taken a short course at a farm school. The farmer engaging such labourers was required to board and lodge them under reasonably comfortable conditions and to pay them the current rate of wages for skilled farm workers. Application for Danish labourers was to be made to the Board of Agriculture.

A small number of Danish agricultural workmen was also recruited in 1918 by the Ministry of Labour (3). Every care was taken to obtain men who were definitely qualified to undertake agricultural work.

C. Conscientious Objectors.

To find employment for conscientious objectors a committee was formed at the Home Office, and this Committee was able to arrange for the employment of some of them on the land (4). The Home Office Committee preferred to send out men for work in groups, but also supplied them

(1) *Journal of the Board of Agriculture*, January 1915.

(2) Notice issued by the Board of Agriculture on 22 March 1916 (*Journal of the Board of Agriculture*, April 1916).

(3) Memorandum, dated 3 June 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, June 1918).

(4) Circular Letter, dated 21 February 1917, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Committees (*Journal of the Board of Agriculture*, March 1917).

in small parties to individual farms, provided the County War Agricultural Committees would supervise the arrangements for such parties.

Where the men were employed in groups the Home Office bore the expense of housing, feeding (up to 12s. 3d. per week per man) and clothing the men, of medical attendance and insurance, and of paying them their personal remuneration of 8d. a day, less any deductions. The County War Agricultural Committee had to undertake to house and feed the men, settling with the Home Office Committee the expense to be incurred, and charging it, when incurred, to that Committee. On the other hand the Home Office Committee were credited each month with the wages at the current local rates payable for ordinary civilian agricultural labourers.

Where the men were sent out in small parties to farms, the County War Agricultural Committee had first to arrange for the collection of information as to the farms on which this form of labour was required. They also arranged for the reception of the men, for their despatch to the farms and for the inspection of the accommodation, etc., provided. The farmer paid to the representative of the War Agricultural Committee the sum fixed by the Executive Committee, with the approval of the Home Office Committee, as representing the local current rate of wage for men either (a) skilled or (b) unskilled in agriculture, while the Agricultural Committee's representative paid the men the sum fixed by the Home Office as their personal remuneration (8d. a day less any deductions) and accounted for the balance to the Home Office Committee.

The hours worked were those obtaining in similar work in the district.

While they were at work the conscientious objectors were not under military discipline, but were subject to civil control exercised by a responsible person nominated by the War Agricultural Committee to act as agent for the Home Office, or by the employer or body of employers. Any man who misbehaved himself or was persistently idle or was otherwise unsuitable for the work could be removed if the employer required and, if necessary, could also be made the subject of disciplinary action by the Home Office Committee.

D. *National Service Volunteers and War Agricultural Volunteers.*

In the spring of 1917 the Board of Agriculture made arrangements with the National Service Department whereby farmers would be able to secure for agricultural work men belonging to the National Service Volunteers enrolled by that Department (1).

Farmers desirous of employing them were to apply on the proper form. When filled in, the forms were to be sent to the War Agricultural Executive Committee of the county in order that they might have an opportunity of considering and recommending the relative importance of the applications. This was to ensure that priority should be given to the

(1) Circular Letter, dated 27 March 1917, addressed by the Food Production Department of the Board of Agriculture to Agricultural Executive Committees (*Journal of the Board of Agriculture*, May 1917).

applications from farmers known to be most in need of additional labour. Subsequently the forms were to be forwarded by the Committee to the District Agricultural Commissioner of the National Service Department, and it would be the duty of that official to endeavour to supply each farmer concerned with the labour he required.

It was suggested by the Board of Agriculture that the applications of farmers for National Service Volunteers should be dealt with by the Labour Sub-Committees which they had recently recommended the War Agricultural Executive Committees to appoint.

In a Memorandum on the sources of additional labour for harvest work, dated 5 July 1918, the Food Production Department urged the Agricultural Executive Committees to make every effort to enrol every available man under the War Agricultural Volunteer Scheme (1).

War Agricultural Volunteers were men who entered into an agreement with the Minister of National Service to undertake agricultural work to which they might be assigned by the Minister during the War for a period not exceeding 12 months in all (2).

No man was enrolled as a War Agricultural Volunteer until he had actually been accepted by an employer as suitable for an actual vacancy, and the vacancy had been approved by the Agricultural Executive Committee of the county.

Vacancies for seasonal workers were not so approved.

Men were enrolled as War Agricultural Volunteers either through the agency of an Employment Exchange or through the Agricultural Executive Committees. They were enrolled either for general work (that is, for work anywhere in England or Wales) or for local work (that is for work within daily reach of the volunteer's home).

The rate of wages paid to the volunteer was the rate current for the job on which he was employed. Over and above his wages he received the following allowances:—

1. *Travelling Allowance.* — (a) If the farm were at a distance beyond that which he could reasonably travel daily from his home, a free railway warrant at the commencement and completion of the work which he was directed to take up, or (b) if the farm were within daily travelling distance from his home, the daily cost, if any, of a workman's return ticket by railway.

2. *Subsistence Allowance.* — If the work were beyond daily travelling distance from his home and if he had dependants for whose maintenance he was responsible and from whom he was obliged to be separated owing to his being at such work, subsistence allowance at the following rates:—

(a) If married, or if unmarried and his home was mainly dependent on him, 2s. 6d. per day for seven days per week;

(1) *Journal of the Board of Agriculture*, August 1918.

(2) Statement issued by the Ministry of National Service (*Journal of the Board of Agriculture*, July 1918).

(b) If unmarried and his home was partially dependent on him, 1s. 6d. per day for seven days per week.

If, after being placed in employment by the Minister of National Service, his employment, owing to no fault of his own, came to an end during the war, and no further work were available for him, a War Agricultural Volunteer was entitled to receive an out-of-work allowance at the rate of 3s. 6d. per day (including Sunday) for any remaining portion of a period of six months from the date on which he was placed in employment by the Minister of National Service. The first payment of this allowance was due one week after the commencement of unemployment.

No man who had not attained the age of 45 at the date of his application for enrolment would be enrolled as a War Agricultural Volunteer unless he proved that he was in Medical Categories B3 or C3 or in Grade 3. The Ministry of National Service arranged that so long as a man continued to be engaged as a War Agricultural Volunteer he would not be liable to be called up for military service, provided he applied for such exemption.

Men who entered agricultural employment after 28 May 1918 could be enrolled as War Agricultural Volunteers and assigned to their existing employment, provided they were otherwise eligible for enrolment and the employment was approved by the Agricultural Executive Committee (1). Such men might claim subsistence allowance only and not daily travelling allowance. Subject to similar conditions, men who were employed on non-agricultural work could be enrolled and assigned to the same employer for employment on agricultural work. Any man who had been placed as a National Service Volunteer in agriculture could, on leaving his National Service Volunteer job, be enrolled as a War Agricultural Volunteer, notwithstanding his having been engaged in agriculture on 28 May 1918.

*E. Schoolboys, Schoolmasters, Ministers of Religion,
Civil Servants, etc.*

In the early part of 1915 the Labour Exchanges approached the various authorities which had charge of boys, including the Industrial and Reformatory Schools, with a view to obtaining boys for placing in situations on farms or market gardens (2). The number obtainable from this source was not, however, very large.

The shortage of labour being much more serious in 1916 than in 1915, the Board of Agriculture addressed a Circular Letter to the War Agricultural Committees asking them to ascertain the probable demand for aux-

(1) Information circulated to County War Agricultural Executive Committees by the Food Production Department of the Board of Agriculture on 25 October 1918 (*Journal of the Board of Agriculture*, November 1918).

(2) Statement issued by the Board of Trade (*Journal of the Board of Agriculture*, May 1915).

iliary and holiday labour both for the harvest and for other seasonal work. It was probable that assistance could be obtained from the masters and boys of public and secondary schools, and from such bodies as the Boy Scouts Associations, the National Union of Teachers, the National Schoolmasters' Association, Officers' Training Corps, the Architectural Association, and industrial co-operative societies.

The Board urged that the resources and machinery of the Labour Exchanges should be used in mobilizing the available labour. They also suggested that local registers should be kept of those persons who were willing to assist in harvest work and that the country clergy and ministers of all denominations, or the village schoolmasters, should be asked to act as registrars and to put farmers in touch with those persons who registered their names.

A typical case of the employment of school boys was described in the *Journal of the Board of Agriculture* of October 1916 (1). The British Flax and Hemp Growers' Society, which was formed to administer grants from the Development Fund for the purpose of reviving flax and hemp growing in England was faced during the summer of 1916 with a serious shortage of labour for the flax-pulling in the Yeovil district of Somerset. A sufficient number of women was not to be relied upon and no soldiers were available. The Bristol Grammar School authorities were accordingly approached and, after consideration, undertook to render all the assistance in their power. A company of 60 strong boys, varying from 15 to 18 years of age, volunteered for the work.

In view of the fact that the flax existed in patches varying from 2 to 6 acres, situated in different parishes, which were often separated from one another by a distance of 3 or 4 miles, it was decided to form a camp at a central position where the boys could live in semi-military fashion. The Yeovil Local Committee of the Society, composed of farmers and flax spinners of the district, selected a site for the camp in a sloping field at South Petherton, close to a river, and provided every possible convenience to make it a good camping ground. In so far as the camp organization was concerned the school submitted an estimate of the cost, undertook all responsibility and made the necessary arrangements. A small advance party with baggage travelled by train and the remainder of the party cycled from Bristol to South Petherton. A master accompanied the boys to act as quartermaster, and undertook the organization of supplies; another master went as commandant of the camp, and the school sergeant acted as cook.

The boys rose at the sound of the bugle at 6.45 a. m. and put the camp in order before breakfast, which was served at 8 a. m. By 9 a. m. the whole company, with the exception of a small camp party, left on their bicycles for the flax fields, which were generally situated some three or four miles away. Wherever pulling was in progress one of the Society's Belgian experts was present to supervise the operation.

(1) Article entitled "The Pulling of Flax in Somersetshire", in the issue mentioned.

Pulling was continued until 1 p. m., when there was an interval of hour for lunch, which was brought to the field. At 2 p. m. work was resumed and continued until 5.30 p. m. Camp was generally reached again at 6 p. m.

The catering was arranged at 1s. 6d. per day; the transport of camp equipment together with incidental expenses brought the total up to £25. This cost worked out to about 15s. per boy. The cost per acre of flax pulled was found to be £2 10s. Women were also employed on the flax-pulling, but it was found that the cost of women labour was about £3 5s. per acre of flax pulled.

More systematic efforts to organize the supply of boys and other seasonal workers were made in the spring of 1917, when a Central Harvest Committee was formed by the National Service Department for the purpose of providing additional labour for the harvest and other work on the land (1). The Committee was representative of the public and secondary schools, civil servants, the Clergy National Service Committee, the Free Church Council, the National Union of Teachers, Boy Scouts Associations, Church Lads Brigade, and Cadet Corps. The Cavendish Association (representing the public and secondary schools) was appointed to carry out the arrangements under the supervision of the Director of the Agricultural Section of the National Service Department.

In order to facilitate the arrangements delegates representing the public and secondary schools, the Church of England, the Free Churches, and the elementary school teachers were appointed for each county to confer with the National Service Commissioners and Sub-Commissioners and with the County War Agricultural Executive Committees. The four delegates, together with the National Service Commissioner (or Sub-Commissioner) in each county, and the Agricultural Executive Committee of the county, formed an Advisory Committee to consider questions relating to the demand for and supply of this special class of labour.

• It was one of the duties of the Advisory Committee to impress upon farmers the necessity of utilizing the labour provided by the National Service Department. The Advisory Committee also received from public and secondary schools in the district particulars of squads of boys available for work in their own localities, either in term time or holidays, and applications for work from ministers of religion, elementary school masters and civil servants residing in the county. In all these cases the names and addresses of squad managers were also to be furnished to the Advisory Committee. When the demand for this kind of labour could not be met locally, the Advisory Committee notified the Central Committee, giving full particulars of accommodation available, locality of farms, etc.

The Central Committee communicated the demands to the various organizations who were collaborating in carrying out the scheme. Offers

(1) Scheme drawn up by the Committee and communicated on 7 May 1917 by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, June 1917).

of squads required to supply the demands which had not been met locally were sent by the Central Committee to the Advisory Committees.

It was further the duty of the Advisory Committees to arrange for the accommodation of squads. Large squads were accommodated in central places, to serve several neighbouring farms, going to and fro by bicycle or other means. They were billeted in schools, in institutes, in barns, under canvas, in village inns or in country houses (occupied or unoccupied). Small squads were accommodated with farmers and, where possible, with local residents. Squads were responsible for their own catering.

The wages of each squad were settled by the Advisory Committee with the employer, subject to the general condition that the pay of adults was to be at the current rate for the job on which they were employed, and that the pay of boys was to be threepence or fourpence per hour. Where the Advisory Committee and the employer could not agree the case was decided by the National Service Commissioner or Sub-commissioner.

The employment of public school boys, in particular, was a great success; indeed, not a single complaint was received at the Food Production Department concerning any of the numerous camps or gangs (1).

Arrangements for the 1918 harvest were made well in advance. As early as February the Food Production Department urged the War Agricultural Executive Committees to ascertain as soon as possible the demands of the farmers for school boy labour (2). Many Executive Committees appointed District Representatives for School-boy Labour, in order to obtain the necessary information. By arrangement with the Ministry of National Service camps were formed where much harvest labour was required (3). In all about 15,000 boys from public and elementary schools, boy scout divisions, etc., were employed in the harvest of 1918 (4).

Another source of additional labour for the 1918 harvest was found in the temporary release of local authority employees and policemen (5). The Ministry of National Service issued a Circular Letter to all county clerks, town clerks and chief constables, in which special facilities were granted for the purpose, and the Food Production Department instructed the Agricultural Executive Committees to communicate with the local bodies in their area with a view to obtaining the assistance of as many employees and policemen as could possibly be spared.

Yet another source of labour for the 1918 harvest was found in the employment for part of their time of persons who had other occupations. In many districts Part-Time Committees had already been formed under

(1) *Journal of the Board of Agriculture*, December 1917.

(2) Memorandum, dated 27 February 1918, addressed by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, March 1918).

(3) Memorandum dated 5 July 1918, issued by the Food Production Department of the Board of Agriculture to County War Agricultural Executive Committees (*Journal of the Board of Agriculture*, August 1918).

(4) *Journal of the Board of Agriculture*, August 1918.

(5) Memorandum cited in note (3).

the Ministry of National Service and these also assisted in finding part-time labourers for farm work. In districts where such committees did not exist, the Food Production Department suggested that the Agricultural Executive Committees should appoint local representatives to organize part-time labour and place it with the farmers. In some counties it was arranged that all the roadmen should be made available as part-time workers. Large numbers of men were also released for part-time work during the harvest by quarry-owners and other employers of labour.

Towards the end of the war discharged sailors and soldiers also became available for work on the land. Thus, for example, in August 1918, the Food Production Department suggested that such men should be trained as tractor-drivers, by arrangement between the Agricultural Executive Committees and the Local War Pensions Committee (1). They were to be paid by the Ministry of Pensions until such time as they were taken over by the Executive Committees as competent tractor-drivers.

J. K. M.

ITALY.

MEASURES ADOPTED DURING THE WAR TO MAINTAIN THE SUPPLY OF AGRICULTURAL LABOUR.

The immense quantities of material of all kinds required for military operations and for the needs of the Italian army, the increasing difficulty in obtaining supplies from abroad, rendering necessary the maximum utilization of internal resources, the calling up of all military classes and of those who had undergone a second medical examination after being pronounced unfit, the necessity for safeguarding the sources of national production, and for maintaining intact the economic forces of the country, were all factors converging to lead the Italian Government to issue a series of measures during the war intended to ensure to farms the supply of labour essential to their working. The principal methods adopted to meet this need were the granting to those called up either total exemption or temporary leave from active service, and the employment of prisoners of war. A characteristic feature of the system of exemptions was its constant re-adjustment with the object of reconciling the changing requirements of national economy with the need of men for the army, and thus fulfilling at every moment the purposes for which it had been set up.

(1) Memorandum, dated 17 August 1918, issued by the Food Production Department to County War Agricultural Executive Committees. (*Journal of the Board of Agricoltura*, September 1918).

As regards agriculture, we may note that during the earlier period measures of a general character were promulgated for the releasing of soldiers who could be utilized among others by farmers; but as mobilization proceeded and labour became less and less available, the need was felt for special and wider measures in view of the requirements of agriculture, formulated by agreement between the Ministries of War and of Agriculture. We will treat of each of these separately, with a short excursus on the employment of prisoners of war and on other measures adopted for supplementing the deficiency of labour in the rural districts.

I. — MEASURES OF A GENERAL CHARACTER FOR RELEASING SOLDIERS FOR INDUSTRY, AGRICULTURE AND THE PUBLIC SERVICES.

§ I. TEMPORARY EXEMPTION FROM SERVICE OF SOLDIERS ATTACHED TO PRIVATE FIRMS OR UNDERTAKINGS OF IMPORTANCE TO THE ARMY OR THE NAVY.

The first care of the Government was to ensure the supplies for the army. Hence, even from the beginning of 1915, the fundamental principle (1) was laid down that in the case of a call to the colours men of any class or category might be temporarily exempted from service provided they had been giving their services for at least a month previously in private establishments or undertakings which "provided material or labour on the account of the army or navy, or supplied raw material for the aforesaid."

In the actual carrying out of this principle, the military authorities considered it advisable to place certain limitations on the grants of exemption, as follows:

1. Privates promoted to the rank of officer were only eligible for exemption if they had completed a certain period of service in such a way as to fit them to discharge their new duties with ability and dignity (Circular 5,560 of 31 August 1915).

2. Officers of the reserve, in the auxiliary services, and those belonging to the complement of officers (*ufficiali di complemento*) could only be temporarily exempted if indispensable and when there was no possibility of replacement, such conditions to be estimated on the strictest and most rigorous lines (Circular already cited).

3. Officers or men, even though declared exempted, were not permitted to take advantage of exemption if they occupied positions in their unit or performed special duties of such a nature that their removal might be presumed likely to create inconveniences not counterbalanced by the utility of the work they could perform in the private firm or undertaking (Circular 2,842 of 16 August 1915).

The law avoided particularizing the firms and undertakings whose staffs were eligible for temporary exemption, confining itself to stating

(1) Decree law of 29 April 1915, No. 561. *Gazzetta Ufficiale del Regno d'Italia*, No. 11: Rome, 8 May 1915.

the proviso that the firms or undertakings must supply materials or work on the account of the army or navy or must furnish the raw materials for such. A classification of these firms and undertakings in fact presented great difficulty, as, from the immense number of materials and types of work necessary to the requirements of a modern army, either directly or indirectly all the national industries of a certain importance play their part in furnishing supplies to the army and navy.

Temporary exemption could only be granted when it was recognized that the men were indispensable to the duties they were discharging in the offices or undertakings and that there was no possibility of replacing them.

The ascertainment of the conditions on which exemption depended and the decision taken in the matter were alike delegated to special local committees, consisting of officers of the army and navy, assisted where thought desirable by persons not belonging to any administrative military department but of special technical qualifications and proved integrity. The composition of these committees was later modified by the addition of fathers of families who had one or more sons serving at the front. These had a consultative vote (Lieutenancy Decree 12 April 1917, No. 629). Representatives of the Provincial Agricultural Committees were also added (Lieutenancy Decree of 25 August 1917, No. 1,455).

Farmers or farm-managers who proposed to ask for the temporary exemption of their own staff made the application to the committee having jurisdiction in the area, stating the full circumstances, the complete number of persons attached to the farm, the duties discharged by the men for whom temporary exemption was desired, as well as all information going to show the necessity for their work and the loss or inconvenience, if any, likely to result to the farm by the withdrawal of the men for whom exemption was requested.

The aforesaid committees had the power to cancel the grant of exemption if it was proved to have been obtained irregularly (1).

In their judgment the circumstances making the person indispensable must be of practical importance (2); in relation, that is, to the urgency of the work, to the labour supply available, to the special qualifications of the persons concerned and to the importance of the objects it was desired to attain. The committee "must not lose sight of the fact that in the event of mobilization it is the first duty of every soldier to serve in his proper capacity under the colours, and that no one can be released from that duty, even temporarily, except for some State interest of import-

(1) The powers and duties in respect to investigation of claims and subsequent arrangements which by the Lieutenancy Decree were vested in the Minister of War, were transferred to the Minister for Arms and Munitions, as from 16 June 1917, the date of the creation of this latter Ministry.

(2) In paragraph 12 of the regulations for the execution of the Royal Decree of 29 April 1915, No. 561, and of the Lieutenancy Decree of 17 June 1915, No. 887, relating to the exemption of called-up men, approved by Ministerial Decree 30 June 1915. *Gazzetta Ufficiale del Regno d'Italia*, No. 175 Rome, 14 July 1915.

ance." It followed that exemption was to be a matter for consideration only when the Committee was assured that the individual work of the men in private firms could contribute in a marked and positive way to the advantage of the State, with results that could not otherwise be attained.

When it became necessary to decide between several men having the same qualifications as to which among them might be declared eligible for exemption, preference had to be given to these who belonged to the older classes and who had not received military instruction.

Exemption was granted for a definite period not exceeding three months (1), subject to extension on further consideration if the circumstances which led originally to its being granted were still in existence on the expiration of the period. Failing such circumstances, the owners or managers of the firms or undertakings were expected to release exempted men on the very day and they had to present themselves on the next day to the competent authority so as to be drafted to their own units. Here it may be noted, that even when exemption had been obtained for a man, his employers remained under the obligation of seeking every means of releasing him at the earliest possible moment. The training of other members of the staff, taking on of new staff, utilizing the work of women or young persons, reducing the number of those directing the work, restricting production to what had direct relation to the requirements of the army or the navy, all methods had to be tried by the management before withdrawing a citizen from the performance of his military duties.

The business firms, establishments or undertakings had the power of appealing against the decision of the local committees to the Ministry of War or the Admiralty as the case might be, who if it was thought advisable could submit the appeals to a Central Committee, consisting of an officer of the rank of general, as chairman, and seven officers or civil officials of high grade of whom four belonged to the army administrative departments and three to the naval administration. To this committee there was added later (Lieutenancy Decree of 12 April 1917, No. 629) (2) a member possessing special knowledge of agricultural matters, with a vote in debate, nominated by the Minister of Agriculture, who also nominated another person, similarly qualified, to act as his substitute. Questions of principle relating to temporary exemptions (interpretation of regulations, instructions to be issued to local committees, etc.) could also be referred to this Committee.

Finally in order to ensure that the procedure of the local committees for temporary exemption was in order, the Minister of War could order inspections to be held. The inspectors (officers of the army or navy of the rank of major-general or colonel or of corresponding naval rank, or civil officials of the two administrations of equivalent grade), after examining the minutes of the local committees, making enquiries and obtaining the necessary information, issued to the chairmen of the

(1) We shall see later the modifications introduced as to this limit in favour of agriculture.

(2) *Gazzetta Ufficiale del Regno d'Italia*, No. 100. Rome, 28 April 1917.

local committees the necessary instructions for doing away with any irregularity or putting down any abuses the inspection might reveal. They could even, if confronted with facts of exceptional importance, at once cancel exemptions which proved to have been granted without due reason. They had moreover to present a detailed report to the Minister of the investigations they had made, giving him an account of the measures adopted, and stating proposals that they considered advisable in the interests of the service.

By degrees the need was felt for special enactments relating to definite groups of firms supplying the needs of the army. Thus it had been observed that the criteria followed by the local committees in deciding on the eligibility for exemption of the staff of firms supplying meat, bread, provisions, forage, fuel, differed considerably. It was however felt to be desirable that the procedure should be uniform in such cases, with the double object of ensuring the army commissariat service and of diverting as few men as possible from the combatant services. Acting on these considerations the Ministry of War issued certain general instructions which the committees were to keep in mind (1). For this purpose a grouping of the staff of the firms thus specified was made under the following classes:

1. Managers or representatives of the leading firms which had undertaken supplies for large areas involving complicated organization on the basis of contracts with corresponding schedules extending over long periods. In these cases the exemption as a general rule had to be granted since it was to be presumed that the regular working of these firms depended either wholly or in part on the activities of this managing staff: in the case however of the said managers or representatives merely discharging administrative functions of a kind which could be easily undertaken for them, exemption was to be refused:

2. Representatives of the aforesaid firms in command-areas, persons, that is, to whom the large firms in areas of greater importance entrusted the execution of the service required and the maintenance of relations with the military authorities. As regards these agents, charged as they were with the custody and with the distribution of the goods on the account of the firm and accordingly, in the majority of cases, replaceable by other persons exempt from military duties, there was as a rule no excuse for exemption. Exceptions could only be made in command-areas of special importance, where a complex organization for the provision of supplies was necessary, or in cases where there were certain features in the work of supply which made it impossible for any but persons with definite qualifications to discharge the business adequately:

3. Small firms and local military stores to which recourse was customarily had in all the cases which the administration could not meet

(1) Circular of 9 January 1916, No. 731 of the Ministry of War (Under-secretaryship for arms and munitions), relating to the temporary exemption of the staff of firms supplying barrack requisites, meat, bread, provisions, forage and fuel to the army.

from its own resources or with the means contemplated by the contracts with the large firms. The corresponding staff was not as a rule indispensable by the conditions laid down in the Decree of 29 April 1915, No. 561, and exemption was to be refused, unless exceptional circumstances induced the local committees to submit the question to the central administration.

By the Circular of 10 June 1916, No. 19,104, intended to meet the existing hindrances to the efficient working of the national industry of manufacture of tanning extracts, of curing of skins, and of military boot-making, resulting from the calling up of the highly-skilled workmen (1), there was definitely laid down for each of these industries the number of indispensable and non-replaceable persons required in relation to a fixed output. In this way a sound guiding principle was available for the exemption committees in making their decisions.

In an analogous way, in order to ensure to the woollen mills their maximum productivity, the Ministry of War drew up a table of the staff required (2), in accordance with the producing power of the mills so as to serve as a guide to the committees in deciding the staff indispensable to ensure the regular working of the mills, as the interests of the army supplies and the national economy required.

When applications for exemption were made, based on approved reasons of a serious kind, on behalf of soldiers not conforming to the provisions of the Decree of 29 April 1915, No. 561, and unable to obtain exemption in virtue of it, the local committees — after having ascertained the grounds of the application and on an exact statement of the importance and exceptional nature of the reasons having been rendered — were obliged to refer the matter to the Ministry (Circular 31 August 1915, No. 5,560), setting out all the reasons which in their view entitled the application to favourable consideration.

§ 2. TEMPORARY EXEMPTION FROM MILITARY SERVICE OF SOLDIERS CALLED UP BUT ENGAGED IN THE PUBLIC SERVICE OR ON SERVICE OF NATIONAL IMPORTANCE.

After ensuring the necessary staff to private firms large or small supplying materials or work for army needs, another class of interests of capital importance had to be met, namely that of the public services and the national economy. With this in view there was issued the Lieutenantancy Decree of 17 June 1915, No. 887 (3) which laid down that for the duration of the war temporary exemptions from military service might be granted

(1) For the skin-curing industry the instructions contained in the circular cited were replaced by others by means of the Circular 15 October 1916, No. 34,860.

(2) Circular 1 August 1916, No. 27,000 of the Ministry of War (Under-secretaryship for arms and munitions) relating to the temporary exemption of the staff of woollen mills.

(3) Lieutenantancy Decree of 17 June 1915, No. 887, relating to the temporary exemption from military service of men called up who were engaged in the public services or in service of national importance. *Gazzetta Ufficiale del Regno d'Italia*, No. 158, Rome, 24 June 1915.

to men called up, who were enrolled in the territorial militia, and had been giving their services for at least one month in the capacity of managers, technicians or highly-skilled workmen in:

(a) State undertakings or such private undertakings as had had entrusted to them public services of national importance, or which supplied materials or work to the State;

(b) undertakings belonging to the provinces or communes or such private undertakings as had had entrusted to them public services of local value or which provided materials or work of importance to the provinces or to the communes;

(c) large firms whose activity was of importance to the national economy or the public service.

Exemptions had to be restricted to the cases in which the withdrawal of the men would involve the complete stoppage of the undertaking or a serious disturbance of its normal working.

The new concession was limited to the managers, technicians, or skilled workmen because it was considered that it was only by the removal of those who had in their hands the direction, the responsibility, the administrative threads of the business, or those who fulfilled functions not easily delegated to temporary staff, that any serious disturbance of the business could arise or cessation of its activity be brought about.

The character of the undertakings contemplated in this decree was especially economic: thus among those provided for under clause (c) were undoubtedly included the banking and credit institutions, savings banks and the like. This was the view repeatedly taken by the Central Commission for Temporary Exemptions already mentioned.

The interests of public order were so far involved in the granting of exemptions in that by the stoppage and closure of large firms or undertakings many hands would be thrown out of work and less production of necessities would go on, and hence the general feeling of unrest would be much increased.

The application of the term "large firm or undertaking" underwent some modification as the war went on and the want of materials available for public administration and for the country generally became more marked, while there were fewer persons available either as managers or workmen, and it came to be recognized as necessary to encourage the output also of firms of minor importance. Hence the demands of the military administration in judging of undertakings of national importance came by degrees less stringent.

As a result, the provisions of the Decree cited could be extended equally to bank clerks of the banks of issue of the kingdom, who had been in such employment for at least a month, were recognized as not replaceable, and formed part of the territorial militia. It was essential that the staff of such institutions should have special qualifications for their work which must be performed with peculiar skill and care. These considerations assumed particular importance in respect to the Bank of Italy,

which is not only a bank of issue and a credit-bank, but also discharges the major part of the business of the State Treasury.

Special mention must be made of the Circular of 9 January 1916, No. 730, which ordained that in case of urgency provisional exemptions could be granted, for not more than a fortnight as a general rule. The urgent nature of the case had to be decided after strict enquiry by the chairman of the committee, who was personally responsible to the Ministry for the decision taken.

II. - SPECIAL MEASURES FOR AGRICULTURE.

Agricultural undertakings could and did take advantage of the measures examined above and in particular of the provisions of the Lieutenantcy Decree of 17 June 1915, No. 887, relating to temporary exemptions to be granted to soldiers who were working in the public service or for the national economy: but since the national economy is closely bound up with the life and progress of the rural districts, the Ministry of War came to the decision to allow special measures to be taken to ensure the maintenance of families of agriculturists and to safeguard the general interests of the country. These measures were taken in conjunction with the Ministry of Agriculture, when in March 1917 there was set up a Department for the Employment of Military Labour in Agriculture (1), later, in December 1917, merged with various other services created for the duration of the war into a single Department under the title of *Mobilizzazione Agraria*. We may now explain the main lines of these measures as set out in a series of circulars of 1916, 1917 and 1918.

§ 1. AGRICULTURAL EXEMPTIONS AND GRANTS OF LEAVE.

The system followed in general was that of granting leave for periods when work was particularly urgent, thus endeavouring to meet the need for farm-hands without doing anything prejudicial to the requirements of the army. In the first year of the war no deficiency in the supply of labour was observable because the calling up was only in its first stages and went on gradually: but in the summer of 1916, on the approach of harvest, apprehensions were expressed on many sides that it would be necessary to prolong the harvest beyond the usual time on account of the want of hands. An end was put to these fears by the issue of agricultural leave to soldiers and by the employment of prisoners.

The department mentioned above, recently set up in close relation with the Ministry of Agriculture, was charged with the duty of studying the questions in consultation with the Recruiting Board, and on their pre-

(1) The Italian Government nominated as head of this Department Count Senator Eugenio Faina, former president of the International Institute of Agriculture, who directed its organization and working.

posal the Circular of 7 June 1916, No. 162, was issued by which short periods of leave were granted for harvesting and threshing to any soldier of the older classes of the territorial militia or physically unfit for general service provided he was a mechanic or the sole able-bodied male between the ages of 16 and 60 of the family of a produce-sharing tenant or was the manager of a farm paying a main tax of 1000 liras; in extraordinary circumstances soldiers from the local command area were granted leave from the colours, and also prisoners were detailed for the purpose.

Soon after, namely on 10 July, the Ministry of War, in order to meet the requirements of certain provinces, granted further short periods of leave of ten days for the hemp harvest, on the same conditions. But it was recognized that measures of this sporadic type created many difficulties without much result of value and thus recourse was had to the first systematic arrangements embodied in the circular of 7 August 1916, No. 496 (1).

A. THE FIRST SYSTEMATIC ARRANGEMENTS FOR THE GRANTING OF LEAVE.

In view of the fact that between August and December much work goes on in rural districts so that agriculturists serving could not but be aware of the need of their presence on the farms, the time between 25 August and 6 December was divided into five periods of 20 days each, beginning from the dates as shown below:

First Period	25 August	to	13 September;
Second "	15 September	to	4 October;
Third "	6 October	to	25 October;
Fourth "	27 October	to	15 November;
Fifth "	17 November	to	6 December.

Leave had to begin and end on the days fixed for each period. No leave was granted for intermediate dates, nor could any extensions be granted on any ground whatever.

Leave for a period of 20 days, including travelling, could be granted to soldiers of the older classes of the territorial militia (those born between 1876 and 1881), and to soldiers declared unfit for general service, of whatever class or category, who were:

- (a) heads of families or members of the families of produce-sharing tenants;
- (b) owners or occupiers whether by emphyteusis or as tenants of small holdings cultivating them personally with the assistance of their family, such leave being granted only on condition that there was not in the family any able bodied man between the ages of 16 and 60.

By a "family" in this connection there was not to be understood a group of several families with ties of kindred working on the same holding; but the actual family (father, mother and unmarried children) whether they themselves carried out the whole work of the farm or shared a home with relatives.

Leave could moreover be granted to managers, foremen or assistant foremen, of large agricultural holdings paying a minimum of 1000 liras of main land tax (not including, that is to say, the additional tax imposed by the province and the commune) and left by the call to the colours entirely without managing staff, and leave could also be granted to temporary hands who had given assistance without drawing wages, but on a produce sharing agreement.

No grants of leave could be made to soldiers who were in the zone of actual military operations.

For units, quartered or on service in the war zone, grants of leave could only be made up to 5 per cent. of the strength allowed for by the army formation; outside the zone more latitude was allowed, the basis being a percentage fixed by the commanders of the territorial corps in relation to the needs of the service.

The commanding officers of battalions or dépôts, before passing men for leave, and the mayors of the communes, during the course of the leave, were expected to see to it that the men themselves understood the underlying purpose, social and not merely individual, for which the grant of leave had been made, and that they were prepared to lend their assistance — once the needs of their own holdings were provided for — to other farmers of the locality and particularly to those who might be under arms and for reasons of age or from military exigencies were not in a position to obtain leave.

If within the limits of time indicated need arose for drivers of agricultural machines, the mayors, on the application of individual farmers and after having ascertained that there actually were machines without drivers and that there were not on the spot the means to provide persons capable of working them, had the duty of forwarding applications to the command of the territorial army corps, stating exactly the days and the localities in which the work had to be executed, and the number and kind of skilled men required. The said commands were to draw the necessary staff from the battalions of territorial militia placed at their disposal and from soldiers of any class recognized as unfit for general service. The men detailed for driving the machines must be left at the disposal of the farmers for the whole time reckoned necessary to complete the work in the specified locality.

In those areas where agricultural work is done by wage-earning labourers or by means of casual labour supplied by immigrant labourers, and also in those where there proved to be a shortage of labour during the period of time mentioned above, the commands of the territorial army corps were authorized, on the application of the mayors of the communes included in the area of their jurisdiction and independently of any staff supplied for machine-driving, to furnish the men required, drawing them from the battalions of the territorial militia or from the corresponding depôts.

Before acceding to these requests the commands of the army corps submitted them to the provincial agricultural commissions established in the chief town of every province, in order that the said commissions (formed

for the purpose of the prefect, the representative of the military authority and the Director of Itinerant Agricultural Instruction), might judge of the actual necessity or desirability of granting the applications, either wholly or partially, and might submit their conclusions to the commands of the territorial army corps, for definitive action.

As soon as the numbers of permits had been fixed, the commands of the battalions or the depots made choice of the men from rural districts. These who availed themselves of the help of the soldier labourers had to find the necessary implements. Food and suitable lodging had to be provided by the bodies or individuals at whose disposal the men were placed.

A wage equivalent to that paid to free labour had to be set aside for soldiers detached as above, this wage being chargeable on the bodies or private persons availing themselves of the work of the soldiers. This was paid to the authority responsible for the men, such authority using a portion (60 centesimi) to meet the expense of outfit, paying another portion (one lira) as pocket-money to the men, and depositing the rest in post office savings accounts made out in the name of the individual concerned.

The commands of the army corps in conjunction with the prefectural authorities had to take every means to ensure the exact carrying out of the agreements.

Later (1) certain restrictions contained in the circular detailed above were abolished, and in addition to the concessions already made, special leave was granted for the sowing "so as to ensure the cultivation of the fields and to avoid the leaving unsown of any farms". Leave for this purpose could be granted to a soldier — whatever might be the class in which he was enrolled or his state of fitness for general service — belonging to the family of a produce-sharing tenant which had not benefited and could not benefit by the various kinds of agricultural leave above mentioned, which did not include an able-bodied man between the age of 16 and 60 and required to sow at least a hectare in cereals in the course of the season.

Besides the families of produce-sharing tenants, families of owners or occupiers could apply for leave to be granted for the sowing, also those of holders in emphyteusis and tenants of small farms in the same circumstances and provided they cultivated their holdings themselves: similarly those of casual labourers not receiving wages or of wage-earners who assisted in the wheat harvest. In the case of wage-earners it was a necessary condition that the amount received in kind of various sorts of produce was of greater value than the money wage.

For the above purposes the expression "family occupying a holding on a produce-sharing tenancy" (*famiglia colonica*) was understood in the agricultural sense, that is, as denoting the group of persons consisting of one or more families living together, farming the same holding and bound by the same produce-sharing agreement. Hence, even in the case where the holding was worked by separate families the leave could be

(1) Circular of 13 October 1916, No. 604. *Giornale Militare Ufficiale*, No. 61^a. Rome, 14 October 1916.

granted to one man only. It lasted twenty days, not including the journey.

Such was the procedure up to December 1916. On that date in view of military exigencies, notice was given to the Department for the Employment of Military Labour in Agriculture, then regularly constituted, of the imminent calling up of the classes of men born in 1874 and 1875, and of those born in the first four months of 1899, and the Department was at the same time invited to prepare a scheme calculated to minimize as far as possible the effect this must have upon agriculture.

A scheme was accordingly prepared on the basis of full and careful enquiries, from which it appeared that for the purpose of working the farms throughout the country the total complement of persons required was about 143,000 released for an indefinite period, and 90,000 on thirty days leave repeated at least twice a year, during the busy seasons. The scheme was in the main accepted by the Ministry of War and the Supreme Command, these bodies however reducing the exemptions to 100,000 and the grants of leave to 70,000, but under certain conditions intended to make this withdrawal of forces less prejudicial to the army, inasmuch as both exemptions and grants of leave were to be confined to the unfit and to the soldiers belonging to the classes of those born in the years 1874 to 1877. In view of these restrictions and in order that the Council of Ministers, to whom was reserved the decision in a matter which touched so many personal and regional interests, should be enabled to deliberate with full knowledge, the Department drew up a tabular statement in which were shown, province by province, the results to be anticipated from the distribution of 100,000 men on leave, according as the basis adopted for the distribution was the system of land-tenure, the gross value of the produce, the rural population or the area cultivated. The Council of Ministers, however, at the sitting of 16 February 1917, felt that to propose differential treatment, exempting some and granting temporary leave to others on whatever basis the distribution might be made, would create an unfavourable impression in some provinces. Hence it was considered inadvisable to adopt the scheme and arrangements were made for meeting the more urgent requirements of agriculture as quickly as possible by means of grants of temporary leave.

The Minister of War consequently authorized for the months of March and April two leave-groups, each including 50,000 men, drawn from the territorial zone, and 30,000 drawn from the mobilized troops, each group to have one month's leave, the scheme being confined to the classes of those born in 1877 or earlier, and to the unfit up to the class of those born in 1881. These arrangements formed the subject of the circular No. 137, of 19 February 1917 (1). A few days later regulations followed for a small number of exemptions in favour of the managers of

(1) Circular 19 February 1917, No. 137, relating to the placing of military labour at the disposal of agriculture. *Giornale Militare Ufficiale*, No. 13^a. Rome, 19 February 1917.

farms and of co-operative associations. But the impression produced was not favourable, and at the sitting of the Chamber of Deputies of 13 March the Minister of War announced that from 15 May a new period of leave grants would be initiated for the same total number of men, 160,000, but divided into three relays, of 40 days each. The number of soldiers to proceed to the rural districts thus fell per relay from 80,000 to 53,333, but to counterbalance this the number of working days was increased. The Minister added that the limit of that part of the yield of a farm on which a tax could be levied would be reduced, exemptions would be allowed for certain classes of skilled hands, and the limit of area to be cultivated in order to obtain a grant of leave would be done away with. The number of exemptions to be granted to managing staff and to skilled hands was not fixed.

These provisions were given concrete shape by the Minister of War in Circulars Nos. 233 and 234 of 4 April 1917 (1).

It very soon however became evident that a much larger number of men must be detached, and towards the end of June the Department for the Employment of Military Labour received instructions to present a new scheme for the purpose. The enquiries necessary, begun in the middle of July, led to the Circular 552, of 25 August 1917 (2), which cancelled the regulations contained in Circulars 137, 151, 168, 233, 234 of 1917 and introduced a new system which we shall proceed to explain.

B. THE NEW REGULATIONS RELATING TO TEMPORARY EXEMPTIONS AND OTHER ARRANGEMENTS FOR DETACHING SOLDIERS FOR THE BENEFIT OF AGRICULTURAL PRODUCTION AND PARTICULARLY FOR CEREAL CULTIVATION.

I. *Temporary Exemptions from Military Service.*

Temporary exemptions from military service, in conformity with the prescriptions of the Decrees of 29 April 1915, No. 561, 17 June 1915, No. 887, and 12 April 1917, No. 629, of which mention has already been made, could be granted on the basis of the new circular with or without fixed date of expiry, and were all liable to be revoked in accordance with military exigencies. Those with fixed date of expiry could extend to six months in each case and must be commensurate with the presumable duration of the circumstances required to exist both on the side of the farm and on that of the soldier to be exempted before the privilege could be granted. On any one of these circumstances ceasing to exist, the person benefiting by the exemption (whether farmer, manager or head of family) was expected at once to release the exempted man, and the latter was in his turn expected to report himself to the unit on the strength of which he was.

(1) *Giornale Militare Ufficiale*, No. 25^a. Rome, 6 April 1917.

(2) *Giornale Militare Ufficiale*, No. 58^a. Rome, 25 August 1917.

Broadly speaking the exemptions applied as follows: those with fixed date of expiry, to managers of farms, managers of co-operative agricultural societies, managers of agricultural labour bureaux, and skilled workmen; the other type to manager of farms, skilled workmen, and to one soldier for every farm worked by a family not including among its members another able-bodied man between the age of 16 and 65.

The said exemptions could not be granted except to soldiers who belonged to the classes of those born in 1881 and earlier, or were unfit for general service of whatever class or category. Exception could only be made in favour of farms worked by a family when no soldier member of the family came under these heads. Release of men belonging to mobilized corps was subject to military exigencies.

(a) *Farms in General.* — Farms left entirely without technical or administrative management and of such size and value as completely to absorb the attention of a manager could apply for the temporary exemption of their own manager (this might even be the owner provided he farmed the land himself) or of any older man who at the time of the calling up had been one of the managing staff.

To determine the value of the farm on its minimum computation, the following criteria were employed, varying somewhat as between province and province: the area of the farm, the capital sunk in it, whether in buildings, equipment or industrial plant, the gross yield and the yield on which tax could be levied; this last could not in any case be less than 6,000 liras according to the latest valuation.

Small farms not reaching the minimum value indicated above were permitted to group themselves with the object of jointly fulfilling the required condition and obtaining the exemption of the senior man serving who at the time of the calling up had been one of the managing staff and who could effectively assume the management of all the associated farms.

The duration of the exemption had to be commensurate with the period of time for which the farm required the attention of a manager when worked along its normal lines.

The exemptions, so as to keep within the numerical limits fixed by the central administration and communicated from time to time to the provincial agricultural sub-commissions, and to the exemptions committees, were granted according to a scale of importance to be determined by the sub-commissions themselves. The exemptions committees were expected to communicate to these latter the decisions adopted, whether for or against the exemption in each case.

(b) *Co-operative Agricultural Societies.* — The exemption of the manager might also be granted in the interests of co-operative agricultural societies or federations of such societies, provided they were legally constituted and could show on production of the balance sheet or other documents that they had reached on the working of the previous year a financial position as follows:

1. For co-operative purchasing societies (consortia, syndicates, etc.), the value of the goods resold to members, 500,000 liras annually:

2. For co-operative societies for the sale of produce with or without elaboration of the raw material (co-operative vine-growers' societies, co-operative dairy societies), the value of the raw material delivered by the members, 200,000 liras annually;

3. For co-operative credit societies (rural banks, agricultural banks, etc.), bills in hand at the close of the previous financial year, 100,000 liras.

Exemption might, moreover, be granted in the interests of single sections of co-operative agricultural societies or their federations, always assuming that the individual section had reached the financial position above indicated.

Smaller associations might associate with the object of jointly reaching the minimum financial standing prescribed and of applying for the temporary exemption of the senior among the managers of the associated undertakings.

(c) *Agricultural Labour Bureaux.* — Exemptions might be granted to the managers of agricultural labour bureaux and their federations, when it was proved that the bureaux were left without managing staff and when they were regularly constituted and recognized on the testimony of the provincial agricultural commissions as taking a prominent place in the agricultural economy of the province.

(d) *Skilled hands.* — Full claim to temporary exemptions for the period necessary for the completion of the work was accorded to head workmen or skilled hands, performing especially important functions in the agriculture of the district and attached either to farms worked conjointly or separately or to undertakings employing agricultural machinery (steam ploughing, threshing, installations, etc.)

The skilled hands having first claim to exemption were drivers and mechanics for agricultural machinery, stockmen or stud grooms, milkers, grafters and pruners, cellarers, olive crushers, cartwrights, ploughmen, teamsters, irrigators (whether of rice-fields or employed in the general distribution of water).

In respect to skilled workmen not specified, or in cases of doubt or of different qualifications or functions in different regions, questions were addressed to the Ministry of Agriculture which submitted them, with its own view, to the Central Office for Exemptions (Ministry of Arms and Munitions).

Farmers of small holdings employing hired labour, if the holdings were intensively cultivated and of an area of less than 20 hectares, received consideration on an equal footing with skilled hands, provided they effectively replaced a particular skilled man (ploughman, teamster, milk-er, irrigator, etc.), and provided there was no other person equally qualified to do so on the holding.

(e) *Farms Worked by the Family of the Farmer.* — On farms worked by the family of the farmer and with a mixed cultivation (field and orchard) requiring the continuous work of the whole family throughout the year, the family of the actual cultivator could, if left as a result of the call-

ing up without an able-bodied man between the ages of 16 and 65, apply for temporary exemption (with no fixed date of expiry) for one of the soldier members of the family, of the classes of those born in the years 1874 to 1877 inclusive, or unfit for general service of any class whatever, or failing either of these, for the eldest man out of the remaining classes, if possible not of a later class than that of those born in 1881.

By the family of the actual cultivator of the land was understood the whole number of persons living together, even if not all linked by ties of kindred, who worked in the common interest the same holding (whether owned, held in usufruct or in usage, leased on a rent-paying or on a produce-sharing basis, or on a mixed system).

The holding must at least have the value as determined by the following criteria : the sowing of grain or rice for 1917-18 must not be less than two hectolitres of seed ; the area cultivated for the same year must be three hectares, excluding meadow or natural pasture.

In classifying the farm there were taken into consideration, besides, the sowing and the area, the quantity of orchard trees, and of trees and plants of industrial value growing on the land (vines, olives, mulberries, the citrous fruit-trees, and other fruit-trees), the quality and quantity of farm-animals with which the holding was stocked (cattle, horses or mules, poultry, pigs).

The exemption was revoked if the quantity of grain specified in the application for exemption was not sown on the farm.

In proposing the grants, the provincial agricultural commissions were to proceed within the numerical limits indicated by the Ministry of Agriculture, in decreasing order of importance, according to the rules laid down by the said Ministry.

II. *Ordinary Grants of Military Labour.*

Arrangements were further made that for the period of the autumn work (September to December) ordinary grants of military labour should be made. Such grants might be applied for and sanctioned exclusively on behalf of soldiers, who had previously been agricultural labourers, of the classes of those born in 1874 to 1877 inclusive, and if unfit for general service of any class whatever, who were, whether the one or the other, in the territorial zone or if not at the base in the war zone. The grants were for a period of 40 days, not including the journeys, and took effect in two relays from 13 September to 23 October and from 24 October to 3 December. The fixing of the number was the business of the Ministry of War ; the distribution was then made province by province through the Ministry of Agriculture which had to communicate to the provincial agricultural commissions the proportion of grants assigned to the respective province.

III. *Occasional Grants of Labour of the Forces of the Territorial Command Areas.*

To give effect to the measures already in force, the military authorities were authorized, whenever opportunity offered or an application was made, to allow detachments of men or individuals, as available, to take part in any farm work carried on in the place where they were quartered or not far away.

For the most part, men so detached had to return to their own quarters at night : when however the work in which their help was required was of a specially urgent nature, leave could be obtained for the men to be employed beyond the ordinary limits of the command area, and to pass the night away from their depot, even remaining absent from their quarters for some days ; but this extension of the measure was not to take place unless the results expected from it were of unquestionable value, and unless the men so detached could be conveniently boarded and-lodged at the charge of the persons at whose disposal their services had been placed. The normal wage of the locality had to be paid by the employer to soldiers employed in this way for each separate piece of work.

The circular under consideration contains in addition arrangements for the employment of prisoners of war of which we treat separately.

To resume, it was a characteristic of the new system to distinguish farms where work was continuous from those where it was intermittent. In respect to the former, it took into consideration the exclusively brain work of the managers of large farms and agricultural undertakings, the part brain, part manual work of the skilled hands on farms where hired labour is employed, or of the head of the family on a farm rented on a produce-sharing agreement or otherwise, and finally the purely manual work of the casual labourer taken on at times of pressure of work. Exemptions for an indefinite period were thus granted to managers of large farms or agricultural undertakings, to permanent labourers and in the case of farming families, to one man for each family left without able-bodied men between the ages of 16 and 65 : exemptions for the period only necessary for the execution of the work, to some classes of skilled labour : the grants of 40 days of leave for agriculturists who cultivated small parcels of land not needing continuous work were maintained, and all purely manual work was provided for by organizing the services of soldiers, of the local command-area and by employment of prisoners.

It will be seen that if the number of exemptions and grants of leave to be made had remained indefinite, the problem, thanks to the arrangements above described, would have been solved. As it was, the Ministry of War had settled in advance the number of the exemptions and grants of leave, fixing them respectively at 120,000 and at 350,000; it remained to determine the basis for the distribution among the provinces. From among the four criteria that might be adopted as this basis, namely, the system of land tenure, the area cultivated, the gross value of the agricultural produce, the number of the rural population, this last was chosen, account

being taken only of the males of full working age, between 15 and 65, and the number of these being calculated for each province. This population, amounting in all to 4,765,052, was subdivided into three groups:

Group (a), that of those continuously employed, included holders in emphyteusis or usufruct, produce-sharing tenants, labourers with hiring-agreements, herdsmen, ploughmen, cattlemen, shepherds, stockmen, stewards and hailiffs. There still remained two sub-classes, that of the agriculturists who cultivated their own land or the land belonging to the family and that of rent-paying tenants: in respect of neither of these was it known what percentage cultivated lands that required the exclusive attention of the farmer continued throughout the year, and what percentage cultivated land that only required seasonal intermittent labour; from investigations made it proved that out of the former sub-class — agriculturists who cultivated their own lands or the land belonging to the family — hardly one-tenth could be considered as employed in continuous work, and out of the rent-paying tenants one half. The (a) group, consisting of all these elements, included 1,658,214 men between the ages of 15 and 65;

Group (b), those not employed regularly, made up of the remaining nine-tenths of the sub-class of agriculturists who cultivated their own land, and of the other half of the sub-class of the rent-paying tenants, and also of the sub-class of the casual labourers or day-labourers (2,017,844 men of the ages indicated), included in all 3,012,506 men;

Group (c), made up of the sub-classes of nursery-gardeners, gardeners, woodmen, mushroom and truffle gatherers, etc. including 94,332 men, was not taken into consideration as being of less importance.

By fixing the proportion between the 120,000 exemptions and the total of those belonging to group (a), the percentage of 7.23 was obtained, and by fixing the proportion between the 350,000 grants of leave and the total of those belonging to group (b), the percentage of 11.66 was obtained. The results to be anticipated from this scheme of distribution as applied in the different provinces were set out in a schedule which on being submitted to a Committee of four selected experts was unanimously pronounced to be the most satisfactory of all those drawn out up to that time. This scheme a few days after the publication of the circular we have just now detailed was put into execution in its entirety.

Arrangements were made in 1918 (1) by the Ministry of War in conjunction with the Ministry of Agriculture on lines similar to those of the circular above described and providing that beginning from 1 March of that year, the ordinary grants of military labour should be resumed. Applications for leave could only be made by soldiers who had previously been agricultural labourers, of the classes of men born in the years 1874 to 1878 inclusive, and — if unfit for general service — of any class, but not beyond that of 1892, who were in the territorial zone, or at the base depots

(1) Circular 13 February 1918, No. 71, relating to the granting of troops for the furthering of agricultural production and particularly grain cultivation. *Giornale Militare Ufficiale*, No. 114. Rome, 13 February 1918.

of the war zone ; such leave was of two months' duration, apart from the journey, and the grants were divided into five relays : from 1 March to 30 April ; from 1 May to 30 June ; from 1 July to 31 August ; from 1 September to 31 October and from 1 November to 31 December. For soldiers drawn from base depots of the war zone, there were grants to the number of 1,000 per day, up to a maximum of 20,000 for each relay apart from exceptions made necessary by military exigencies. The total number of grants of leave to be allowed from the territorial area for each of the relays was fixed by the Ministry of War. The distribution of the whole of the grants of leave however was made throughout the provinces by the Ministry of Agriculture. Application for them might be made by farmers employing hired labour, whether the farm was under intensive or extensive cultivation, preferably cereal cultivation, only when the permanent staff attached to the respective farms — whether bound by a yearly hiring agreement or for fixed periods — had been reduced, as a result of the calling up, by more than one-third. The number of grants of leave applied for was not in any case to exceed that necessary to complete the staff of the farms up to two-thirds of the ordinary proportion.

Application could further be made from farms cultivated by families, which, being left without any able-bodied man between the ages of 16 and 65, had not been able to obtain the exemption of a soldier member of the family because the farm to be cultivated did not reach the grade of importance provided for by the Circular 552 of 1917, above detailed, on the condition however that during the season 1918-19 not less than a hectolitre of grain had been sown and not less than half a hectare of land had been cultivated either in vegetables or in trees of industrial value.

The provincial agricultural sub-commissions had the power of arranging that soldiers on leave when their work was not absolutely necessary or pressing on the farm that had obtained the grant of leave, should proceed whether as individuals or in parties to put their services at the disposal of another farm. During leave the soldiers did not draw any rations nor any compensatory allowance, but — except when working with their own family — they had to receive from the farm at the disposal of which they were placed a daily wage equal to that paid in the locality for free labour.

In the following years also the needs of agriculture were kept well in view. To ensure that agriculturists of the classes up to and including that of the men born in 1900, who by profession were capable of working agricultural machinery, should be in readiness for the harvest operations, the Ministry of War authorized the commandants of the army corps to grant to such men leave of 15 days maximum duration besides the journey. Such leave could even be granted to those who had recently been on leave of other kinds, so long as no imperative claims of the service interfered. The Ministry of War, besides, though ordering the calling up of youths enrolled during the levy on the class of those born in 1901 enacted that recruits indispensable to the management of a farm where they might be engaged either on their own account or on that of their family, could obtain postponement of military service until the next

class was called up. Similarly the recruits of the class of those born in 1902 could obtain a year's postponement under the same conditions. Such postponements were granted on the basis of a certificate from the Director of Itinerant Agricultural Instruction, testifying that the work of the recruit was actually indispensable to the proper working of the farm.

In general it may be admitted that both on the side of the local committees and on that of the offices and the authorities charged with the issuing of the exemptions and grants of leave, while due regard was paid to the needs of the army, the utmost pains and care were taken so to apply the regulations as to bring about in the best possible manner the aim proposed; that, namely of increasing agricultural production, an achievement of such immense importance in the period under consideration to the national economy and the public food supply.

We will now pass on to discuss the employment of the prisoners of war.

§ 2. EMPLOYMENT OF PRISONERS OF WAR.

The employment of prisoners of war was regulated in Italy by a series of circulars issued either by the Army Commissariat Department or by the Commission for Prisoners of War established in connection with the Ministry of War, with the duties of acting as a bureau of information, of treating of all questions relating to them (accommodation, food, guarding, health, correspondence, etc.) and of putting into shape the necessary measures. The most important Circulars are those of 21 April 1916, No. 6,583 (prisoner labour), of 27 May 1916, No. 9,442 (employment of prisoners of war in agriculture and industry), of 14 November 1916, No. 24,112 (employment of the labour of prisoners of war), the Circular 8,755 of 1917, relating to the technical staff required for the work of afforesting, and the circular 6,411 of 25 February 1917, referring to prisoners of war employed in agricultural work. Some of the circulars discussed in the preceding section, relating to grants of military labour for agricultural work, include arrangements for the utilization of prisoners. We will here detail the main principles involved (1).

It must first be said that the prisoners were usually assembled close to the commands of those divisions to which the prisoners had surrendered. These commands had without delay: (1) to collect the prisoners into squads; (2) to ascertain the total number of officers and privates respectively, and to communicate these as soon as possible to the commands of the army corps, indicating the locality of the assemblage of prisoners; (3) to make them fall in and march under escort to the place designated by the command of the army corps. The internment of the prisoners was then arranged by means of concentration camps in the country. Their treatment and their employment were regulated in every particular.

(1) RACCOLTA DELLE DISPOSIZIONI DI CARATTERE PERMANENTE RELATIVE AI PRIGIONIERI DI GUERRA E AI DISERTORI DEL NEMICO. August 1918. Army Commissariat Department. Office of the Chief of Staff. Bologna, 1918.

With respect to this latter, in conformity with Article 5 of the Regulations annexed to the Fourth Convention of The Hague besides being put to work inside their quarters, the prisoners could also be detailed for work outside, for public or private administrative purposes, such as construction of barracks, agricultural work, road making or industrial work, etc., in accordance with special rules agreed to between the Ministries concerned and the Commission mentioned.

Officers only were excused from work, while all non-commissioned officers were called upon to do it, endeavours however being of course made to employ these latter as overseers, so far as the work permitted.

Prisoners were preferably not employed in gangs of less than 15 men, so as to avoid excessive splitting up of their guards. They could be employed however exceptionally, as circumstances or necessity dictated, in smaller gangs, especially when the place of work was in the immediate vicinity of a concentration camp, from which the prisoners were sent out each day and to which they returned when the work was over; or in the case of skilled workers with a view to re-establishing small industries that were suffering from want of hands.

Discipline of prisoners while at work and the guarding of them was a matter for the territorial military authorities under whose jurisdiction they fell. These authorities made provision accordingly for forming into squads or groups the prisoners detailed for the work and for conducting them to the place of work under suitable escort, strictly proportioned to the requirements: ordinarily not less than one-tenth and not more than one-fifth of the number of the prisoners.

Quarters were arranged at the place of work in huts or tents. When the work was only a short distance away, the quarters at the depot to which the prisoners belonged could be used.

The military administration made provision for the quarters where State lands could be used and where considerations of season, altitude and climate made it possible to place the men under canvas. In other cases the public or private body at whose disposal the men were placed had to provide the accommodation.

Food was provided by the military administrations and the cooking done by the prisoners themselves.

The hours of work were not to exceed ten. Time for going and coming between work and quarters was counted as work-hours; on the other hand time necessary for consuming rations while at work was not counted. Work on Sundays and holidays was forbidden.

With regard to pay, in the case of work on the account of and directly carried out by a public administration (State, provincial or communal), the pay was fixed at the rate of 5 centesimi for an hour's work. Besides this payment per hour, the public services were expected to pay the expenses of the escort guarding the prisoners. When on the other hand the work was done for a private individual, the pay for each hour of work had to be fixed on a scale proportionate to that of free labour, for the same quantity and quality of work, taking into account however the various negative

factors which tend to diminish the output from prisoners' work, such as the limitations arising from the need for a guard, the weakness of any spirit of co-operation, and above all the absence in prisoners of the stimulus of interest, always calculated to increase production.

Wages had to be paid weekly as a rule, except in the case of the public State services, which make payments on fixed dates, corresponding to those on which they lay claim to the monies due to them.

In addition to the agreed wage and by way of encouragement or reward it was possible, alike for the public services and for the private employer of labour, to give to prisoners whom they considered specially deserving from the quality or quantity of their work an extra recompense in tobacco, food or money.

Money payment however of this kind was not to be handed to the prisoners, but to the officer in charge of the escort who had it placed to the savings bank account of each one concerned.

When a few prisoners had to be employed in work requiring special skill either on account of its importance or its difficulty or the accuracy with which it had to be carried out, in respect of which those responsible had offered specially high rates of pay to the State, thereby indicating the good output they expected, the Commission for Prisoners of War could grant the prisoners a larger wage than that ordinarily given, placing it to their credit in their savings bank books, and could make special regulations whether as to the custody, the quarters, or the food of the few prisoners detailed for the work.

The public services or private employers concerned made provision for the technical direction of the work, and the supply of implements or tackle required also rested with them, as well as that of the special clothing required.

In some cases, officers or privates of special competence in the matter might be placed in charge of the technical direction, being told off for the purpose, more particularly in works of afforestation, for which special arrangements were made.

To ensure that the foregoing regulations were carried out with due regularity, the commands of the army corps in whose area work was being performed by prisoners of war deputed one of the officers of superior rank attached to the depots of prisoners of war to make surprise visits to the places where the work was being carried on with a view to satisfying themselves as to the sanitary conditions, the housing and food of the prisoners, the regularity of the pay, the existence of technical direction of the work and the proper discipline of the labour gangs.

Mention should be made of the Circular No. 137 of 19 February 1917 (1) which laid down special regulations for the granting of military labour for agricultural work. Among the arrangements made was one by which on the request of farmers' associations or of private farmers, the provincial agricultural commissions could apply to the Commission for Pri-

(1) *Giornale Militare Ufficiale*, No. 13^a. Rome, 19 February 1917.

soners of War in Rome for the work of the prisoners. The detachments applied for had as a rule to include 100 men, but could be reduced to a minimum of 30 in accordance with the local requirements. Those benefiting by the grant had to guarantee to the State the payment fixed by the provincial agricultural commission reckoned by each hour of work done by each prisoner (including the time necessary for going from the sleeping quarters to the place of work and for return); they were also expected to provide quarters both for the prisoners and for the officer and men of the guard.

Following on the publication of this circular and with the object of meeting as rapidly as possible the numerous applications for prisoners that were anticipated, the Commission already referred to thought it advisable to formulate certain general regulations in addition to those already set out (1).

On the basis of these there had to be formed in each army corps, at the headquarters of the various units, which necessarily been chosen for convenience of communication, one or more companies of prisoners of previous farming or rural experience for each of the provinces included in their respective areas of jurisdiction. As soon as these companies were formed, the commands of the army corps had to give notice of the fact to the Commission sitting in Rome, and to the agricultural commissions concerned.

Each company, varying in strength from 150 to 300 men according to anticipated requirements, was intended to supply gangs of labourers to meet the applications made by the provincial commissions to the Commission for Prisoners of War.

Military authorities were urged to see that the gangs of labourers were sent with the utmost possible despatch to the place of employment, and to come to an agreement with those employing the prisoners, especially as regarded quarters, so as to secure the inauguration of the services concerned.

The regulations already detailed held good for all that related to the treatment of the prisoners so employed, their discipline, lodging, food, hours of work, and pay.

Later on, the circular of 25 August 1917, No. 552, making as we saw fresh arrangements as to temporary exemptions and authorizing important grants of military labour for the benefit of agriculture, also enacted that prisoners of war, fit for work and not directly engaged in State works, should be equally distributed among all the provinces of the kingdom and placed at the disposal of the provincial agricultural commissions to be drafted to agricultural work.

Farmers' associations and private farmers who proposed to avail themselves of the work of prisoners of war had to make applications to these commissions indicating, among other points, the nature of the work,

(1) Circular No. 6,411, of 25 February 1917, relating to prisoners of war engaged in agricultural work.

the length of time for which a grant of labour was requested, which must not be less than a month, the number of labourers required, which could not be less than 15, the locality and the arrangements for lodging prisoners.

As to the results accruing, it may be considered that, once the initial difficulties of the organization of the service were overcome, they were in the main satisfactory. In the summer of 1916 twenty companies of prisoners were assigned for agricultural work in the rural districts. Particularly important was the sending of 2000 men provided with the necessary implements into Apulia for the harvest and the threshing. Applications whether for agriculture or for industry were practically all dealt with as they came in from the various regions, so that in October 1917 in the majority of the concentration camps only the sick or unfit were left (1).

§ 3. EMPLOYMENT OF WOMEN IN AGRICULTURAL WORK.

The employment of female labour in agricultural work varies in Italy from region to region.

In Sicily and in Calabria, the women are almost exclusively taken up with household work and rarely go into the field, and then practically only along with their immediate family or relatives. In Campania, the Abruzzi and in Apulia and Latium, on the contrary, women work in the fields too: they do hoeing or raking; they occupy themselves in the vineyards or gardens.

In Tuscany, in the Marches and in Umbria it is necessary to distinguish between the women of the family of a produce-sharing tenant and of the family of a day labourer. The former attend to the household and to certain farm duties on the holding. The latter are called upon for their assistance only in view of definite operations such as the hoeing in of seed, the cleaning of wheat or maize crops, etc., work in vineyards, orchards or gardens.

In Northern Italy, where the system of produce-sharing tenancies is general, the women are distinguished as in Tuscany; where it does not exist, they perform different field operations by the day, in particular working in the rice-fields, for cleaning purposes.

During the war, women replaced men on the whole in the different kinds of work previously done by men, especially in Central Italy where as a result of the special circumstances created by the prevalence of the produce-sharing system of tenure, the family occupying a holding on such terms could carry on a much larger number of farming operations than could be expected of labourers in the regions where rent-paying tenancies and occupying ownership of farms are the rule.

(1) See EUGENIO FAINA: *L'utilizzazione dei prigionieri di guerra nei lavori agricoli*. Communicated to the 47th Agricultural Congress summoned by the Society of Italian Agronomists. *Bollettino Quindicimale della Società degli Agricoltori Italiani*, Nos. 7-8, Rome, 15-30 April 1917.

To encourage female labour to reach its maximum efficiency, it was enacted by a decree of the Minister of Agriculture dated 1 June 1916 (1) that medals for agricultural service or other rewards with certificates of commendation should be conferred by the Ministry on women who during the season of 1916 had distinguished themselves in their execution of agricultural work in place of men called up "in an exemplary manner, by their unremitting and valuable activities".

The farms and organizations which had made special use of female labour in agricultural work were also eligible for these prizes.

Communes, local war-time committees, agricultural societies and consortia, farmers' associations, agricultural labourers' associations, and other bodies could recommend to the itinerant instructors in agriculture the women, the farms and organizations deserving of recognition of this kind. The instructors then made up the lists and checked them, and forwarded them with their own comments to the Ministry. An effective stimulus was thus given to the replacement of the men by women in the rural districts, with excellent results, their work together with that of men beyond military age and of boys making it possible to ensure for the duration of the war the regular cultivation and production of the soil.

§ 4. THE VOLUNTARY CIVIL SERVICE AND THE "MOBILITAZIONE AGRARIA".

In order to ensure to agriculture a larger supply of labour, now that the calling-up of the older classes and of those who had undergone a second medical examination had much reduced the quantity available, and to give the greatest possible impetus to agricultural production in accordance with the food requirements of the country, some new and important measures were issued in 1918.

By the Lieutenant Decree of 12 February, No. 146 (2), the Voluntary civil service was inaugurated, that is, citizens, both men and women, born between 1 January 1857 and 31 December 1903, were invited to state whether they offered their services either gratuitously or at a suitable remuneration and in what industry or public service carried on in the commune in which they resided.

The industries in which offers of voluntary assistance were made were the following: agriculture (work of all kinds relating to agriculture, the manipulation and the transport of agricultural produce); the provision industries (rice-grinding, milling, baking, macaroni manufacture, making of fruit and vegetable preserves, the slaughtering of animals for food, fishing); leather-making; the textile industries; building, road-making,

(1) Decree of the Minister of Agriculture dated 1 June 1916 on the establishment of rewards for agricultural service for women who during the season of 1916 distinguished themselves in the performance of agricultural work. *Gazzetta Ufficiale del Regno d'Italia*, No. 131. Rome, 5 June 1916.

(2) Decree 12 February 1918, No. 146, relating to voluntary service rendered by civilians in making their work available for agriculture and specified industries, as well as for the public services. *Gazzetta Ufficiale del Regno d'Italia*, No. 44. Rome, 21 February 1918.

irrigation and drainage; industries and services meeting collective and general needs; mining; wood-working industries; chemical industries, metal-working and the manufacture of other mineral products.

The following were excused from offering voluntary services; (a) soldiers under arms, or on leave, including agricultural leave, and soldiers assigned to firms or undertakings of any kind, whether exempted from military service, under command or placed at the disposal of the firms in question; (b) those engaged in work in military establishments or those belonging to the auxiliary services, or requisitioned firms; (c) those engaged in agricultural work or already giving their assistance in the service of agriculture or in the manipulation or transport of agricultural products; (d) employees and others receiving pay in Government, communal or provincial offices or other public bodies; (e) those unfit for any kind of work; (f) doctors, veterinary surgeons, chemists and nurses following their own profession.

The scale of pay and the other conditions of work were agreed between the parties concerned and could not be lower or less favourable than those obtaining locally in accordance with wage scales and hiring agreements.

Persons taking up work on this voluntary basis enjoyed all the benefits of the laws protecting work-people and of those regulating insurance on the same conditions as other work-people, employees, or wage earners of any kind. They could obtain a certificate of service given and receive a special decoration.

A provincial committee for voluntary civil service was set up in each province, and a Central Committee was attached to the Ministry for the purpose of superintending this service throughout the kingdom.

When the voluntary offers of work were not sufficiently numerous to meet applications, measures were to be taken, according to the wording of the decree, to levy forced labour whether for agriculture or for the industries or public offices situated in the commune where those called upon for such labour resided, such levy to be confined to males of full age.

Of much wider scope and greater efficacy was the Decree of 14 February 1918, No. 147 (1), already cited, relating to the so-called "*Mobilizzazione agraria*" which called together and brought into action all the public and private forces calculated to stimulate the production of food-stuffs in the maximum degree (2).

This decree, in fact, enacted, that, for the duration of the war and up to the end of the complete agricultural year following on that in which peace should be made, the Ministry of Agriculture, with the aim of increasing

(1) Lieutenantcy Decree of 14 February 1918, No. 147, conferring on the Ministry of Agriculture for the duration of the war, and up to the end of the whole agricultural season following on the proclamation of peace, the oversight of cultivation and the organization of agricultural work and referring all disputes arising in consequence of the said decree to a Committee of appeal. *Gazzetta Ufficiale del Regno d'Italia*, No. 44, Rome, 21 February 1918.

(2) See in this connection: SEBASTIANO LISSONE: *La mobilitazione agraria ed il risveglio dell'agricoltura nazionale*. In: *L'Agricoltura Italiana Illustrata*, No. 2, Milan, 25 February 1919.

agricultural production, was to take measures for the oversight of cultivation, for the organization of agricultural work, and further for the assignment to the best possible advantage of requisites of work and production. To this end, the Ministry had power :

(a) to promote, organize or carry out the cultivation of uncultivated lands or exceptional changes in the system of cultivation of value in view of the needs of the country ;

(b) to take measures, in conjunction with the Ministries of War and of Arms and Munitions, for the utilization, especially in the periods of pressure in farm-work, of soldiers and prisoners of war as available, and for the discipline necessary in connection with exemptions and with grants of military agricultural labour ;

(c) to take steps to put to employment on the farms, foremen and labourers who might be available through the organization of voluntary assistance, or in default of that through forced levy ;

(d) to promote increased manufacture of fertilizers, of spraying materials and of agricultural machinery, as well as the preparation and selection of seeds, and to exercise oversight over production and trade in the above commodities ;

(e) to distribute labour, machinery, implements, fertilizers and spraying materials, in such a way as to ensure the maximum yield, and also to facilitate the transport of labour and of everything necessary to agriculture ;

(f) in general, to adopt every measure tending to the increase of agricultural production and to the safeguarding of the food supply.

All citizens, men or women, whose habitual occupation was agriculture or who were considered fit for such work, could be called on for it. Forced labour had by preference to be employed locally. Exactly as in the case of voluntary civil service, the scale of remuneration, the possible payments in kind and any other condition as to the work of those giving forced labour were agreed to between the parties concerned, and could not in any case be less than those obtaining locally in accordance with wage scales or hiring agreements. Where these did not exist, customary conditions were observed.

The forced levy of labour for agriculture and the agricultural industries was to take precedence of forced levy for any other industry.

The organization created for the carrying into effect of the "*Mobilizzazione agraria*" was the following :

Attached to the Ministry of Agriculture there was instituted a Central Committee of Agricultural Mobilization, composed among others, of four members chosen from experts in economic and technical matters relating to agriculture ; of two members chosen from persons of experience in farming and two from agricultural labourers, the Minister acting as chairman. In every province a provincial agricultural commissioner was nominated, the same criteria for the choice being adopted in each locality. This commissioner acted as chairman of the section for the agricultural mobilization service attached to every provincial agricultural commission.

Communal and intercommunal agricultural commissioners, throughout the whole province, had to act in collaboration with the provincial agricultural commissioner.

Other responsibilities fell to the share of the itinerant instructors in agriculture, and to agricultural societies and farmers' associations.

The section for the agricultural mobilization service composed, besides the chairman, of a delegate of the military authority and of six representatives of farmers and agricultural labourers, chosen on an equal footing, was summoned to pronounce *inter alia* on measures relating to the shortage or excess of agricultural labour relative to the local demand, and on measures to regulate and facilitate the migration of labour between province and province, in consultation with the sections of the adjoining provinces. To the same sections were delegated the attributions relating to the temporary exemptions of soldiers called up and to the grants of agricultural leave, exercised in every province by the provincial agricultural sub-commission, referred to in Circular No. 137 of the *Giornale Militare Ufficiale* of 19 February 1917.

The provincial agricultural commissioner was to take steps, in addition to the exercise of special attributions, to draw up an agricultural census of the kinds of cultivation, of the labour and the requisites of labour, to note the variations in the area devoted to different kinds of cultivation in the province, and to put forward all measures likely to increase agricultural production (1).

The communal or intercommunal agricultural commissioner was expected to keep himself informed of the state of cultivation of the lands and to exercise oversight over the application of any type of cultivation that might be ordered; to keep in touch with local conditions of labour; to interpose so as to ensure the maintenance of agricultural work in the event of disputes; to assist by advice and suggestions the ordinary work and the new departures of agriculturists; to facilitate the supply of fertilizers, of seeds and of machines and to watch over their employment; to expedite applications on the part of agriculturists for exemptions and for grants of leave; to overlook those exempted and men on leave in their occupations; to watch the employment of prisoners of war in agricultural work; to exercise functions in connection with the requisitioning of horses or cattle, machines and moveables for agricultural work; to give information on the best means for rendering cultivation intensive; to ensure in every possible way the carrying out of the arrangements laid down for the agricultural mobilization.

Thus a network existed of competent persons who even in the more remote agricultural zones were kept informed of the situation; noted and communicated to the Government the deficiency and the requirements of local

(1) Lieutenantcy Decree of 2 May 1918 No. 618, delegating to the Central Committee the consultative function in relation to everything bearing on the agricultural mobilization and fixing the attributions of the provincial agricultural commissioner, and of the communal or intercommunal commissioners. *Gazzetta Ufficiale del Regno d'Italia*, No. 113, Rome, 14 May 1918.

agriculture, while giving to the means whereby these requirements might be met the closest study and the most effective support: passed on without delay to the mass of agriculturists the information, the measures, the practical assistance furnished by the Government; and generally prepared the ground for the reception and putting into practice of the instructions issued relating to the carrying on of agriculture.

As to the results obtained, it may be said that the provincial, communal and inter-communal agricultural commissioners rendered for the most part constant and unremitting service, and that, when well chosen and wisely directed, they were invaluable, since, notwithstanding the difficulties incident on the war, they succeeded in inspiring the agriculturists with a feeling of confidence and a power of resistance, and in pushing production well above its normal level, in full correspondence with the aims and object of the decree.

* *

To complete the account of the measures adopted by the Italian Government during the war to ensure to agriculture the necessary supply of labour, mention may be made of the attempt made by the special Department attached to the Ministry to utilize the peasant refugees from Venezia whether in the interests of agricultural production or with the object of preventing the permanent diversion of this labour supply from the rural districts; for various reasons however only modest results were obtained. The department also took charge of the wounded of the agricultural or peasant class. These did in fact constitute a labour supply, diminished in effectiveness but not lost, in that suitable and well directed treatment could restore it to practically normal conditions. As early as 1916 a commission was called together under the auspices of the Ministry of Agriculture, consisting of both experts and politicians, and by a large majority the resolution was carried that the wounded of agricultural classes, except those who no longer required daily surgical attention, should be placed in schools of occupational re-education, attached to agricultural institutes of one kind or other. The institutes called upon declared themselves ready to assist all such initiative in every way, and thus arose schools or the wounded of this class that produced excellent results.

The remedying of the shortage of labour in rural districts was always kept in view and it was with this object that the Ministry of Agriculture was further authorized (1) to take steps to make grants of machinery to agriculturists or to associations of agriculturists, on terms of deferred payment. About 8000 tractors were placed at the disposal of the farms and

(1) Lieutenantcy Decree 14 July 1918, No. 1057, which authorized the Minister of Agriculture to grant on deferred payment to agriculturists or their associations, "tractors" and agricultural machinery in general. *Gazzetta Ufficiale del Regno d'Italia*, No. 187. Rome, 8 August 1918.

tens of thousands of hectares were by these means broken up and cultivated. By the Decrees of 18 February 1917, No. 303, and 3 March 1917, prizes and grants for the purchase of apparatus for agricultural purposes were also given, while in August 1917 the State motor plough service was instituted to facilitate by a wide distribution of motor ploughs the working and cultivation of lands.

In conclusion when it is remembered that this enormous withdrawal of workers from agriculture was a thing not merely unforeseen but never believed possible over so long a period, when account too is taken of the inexperience of organizations hastily formed to meet the emergency and also of the ever-recurring difficulties in their practical working, it may be affirmed that the grave problem of the agricultural labour supply in war-time was, thanks to the many and varied measures above examined, successfully solved in Italy.

G. C.

MISCELLANEOUS INFORMATION RELATING TO THE CONDITIONS OF THE AGRICULTURAL CLASSES,

BELGIUM.

NEW TYPES OF LETTING AGREEMENTS. — DELOS (Alb.): La situation de l'agriculture belge, in the *Journal de la Société Centrale d'Agriculture de Belgique*. Brussels, November, 1921.

The instability of the economic situation, the difficulty of determining the respective shares of the landowner and the tenant farmer in production, have brought about in different quarters the adoption of a variable payment for the use of the land, that is to say, the adoption of letting agreements with a sliding scale of rent.

M. Alb. Delos, professor at the State Institute of Agronomy, at Gembloux, has recently made a study of the types of these. Following him we may indicate the bases of some of these contracts.

A. — In the first place we find a sort of disguised payment in kind, based simply on the selling price of certain characteristic products. Let us suppose that the initial rent has been fixed at 150 francs the hectare. This money value is translated into a certain quantity of each of the chief products. For example, as follows:

These 150 francs rent per hectare represent in 1919-20:	100 kg. of wheat at 50 fr.	50 fr.
	5 kg. of butter at 10 fr.	50 fr.
	10 kg. of meat (live-weight) at 5 fr.	50 fr.
		150 fr.

Each year the same quantity of products forms the base, but the variations in their prices may modify the rent charge.

In 1920-21	{	100 kg. of wheat at 80 fr.	80 fr.
		5 kg. of butter at 12 fr.	60 fr.
		10 kg. of meat (live-weight) at 4 fr. . . .	40 fr.
			<u>180 fr.</u>

The disadvantage of this system is that it only takes into account the selling price of the products, independently of their net cost. The elements in production — labour, purchase of fertilizers and feeding stuffs, price of live stock, etc., — are always factors of considerable importance, often exceeding that of the selling price, in the making up of the profit and loss account.

B. — Another system takes into account a fixed rent as a basis, and provides for certain "special factors", namely:

1. The returns obtained on a fixed quantity of produce selected in accordance with regional conditions and the cultivation undertaken, proportionately to the importance of these products in the general working of the farm;

2. Typical items in the expenditure, selected, both as to kind and amount, from among the expenses bulked most largely in the fixing of net cost, in the district under consideration;

3. The application to these items of the prices ruling in each agricultural year.

Let us consider for example the renewal of the letting of a farm let in 1908 for nine years at 150 francs per hectare. The parties are in agreement on this price and decide to arrange for a lease on an sliding scale based on the following amounts and products calculated on the current prices:

150 kg. of wheat	at 20 fr. =	30 fr.
150 kg. of oats	at 20 fr. =	30 fr.
150 kg. of winter barley	at 30 fr. =	45 fr.
100 kg. of live stock	at 1 fr. =	100 fr.
50 kg. of butter	at 3 fr. =	150 fr.
	Total . . .	<u>355 fr.</u>

The difference between this total of 355 francs and the rent of 150 francs as agreed between the parties is 205 francs.

It is then a question of fixing, both in kind and in amount, the typical items in the expenditure the total of which corresponds to this difference of 205 francs: say, in 1914:

400 kg. of nitrate of soda	at 22 fr. =	88 fr.
50 kg. of cattle for fattening	at 0.85 fr. =	42 »
100 kg. of oil-cake	at 20 fr. =	20 »
18 days' labour	at 3 fr. =	54 »
	Total . . .	<u>204 fr.</u>

In 1919, the rent per hectare based on the said agreement will be subject to an increase according to the following figures:

Let us first assume that the average prices for that financial year, calculated according to the market prices reported on the dates fixed, are: wheat, 50 francs (controlled price in 1919); oats, 80 francs; winter barley 100 francs; live stock, 3.50 fr.; butter, 10 francs the kilogramme. The tables in comparison with 1914 will become:

1. In respect to special factors of the receipts, in kind and in weight:

150 kg. of wheat	at 50 fr. =	75 fr.
150 kg. of oats	at 80 fr. =	120 »
150 kg. of winter barley	at 100 fr. =	150 »
100 kg. of cattle on foot	at 3.50 fr. =	350 »
50 kg. of butter	at 10 fr. =	500 »
Total		1195 fr.

2. In respect to the outgoings:

400 kg. of nitrate of soda	at 120 fr. =	480 fr.
50 kg. of store cattle	at 3.20 fr. =	160 »
100 kg. of oil cake	at 100 fr. =	100 »
18 days' wages	at 15 fr. =	270 »
Total		1010 fr.

The rent per hectare, in 1919, will be 1195 less 1010 = 185 francs per hectare.

M. Delos observes that this method, undoubtedly far from perfect and still empirical, constitutes a step in advance on the former method. It can be applied with comparative simplicity, an important point, for it will never be possible to go into the daily routine of complicated arrangements which require management supervision. The value of the method moreover is conditional on the choice of the "typical factors," a choice that must be made with discernment, and must be in accord with the economic circumstances of the farm.

C. — Finally we come to profit-sharing leases. In order to make the working of these intelligible, M. Delos takes as example a farm at Hesbaye, worked on business lines, of average fertility, comprising 63 hectares of main crops, and 10 hectares of grass land and clovers, and proceeds to consider the application of the system to the year 1921.

The following calculations have to be made in succession:

1. Principal crops serving as base:

Wheat	} 63 hectares
Winter barley	
Oats	
Sugar beet	
Grass and forage crops	10 hectares

2. Base price or fixed rent: 150 francs per hectare.

3. Multiples as agreed by contract, including: Once the fixed rent, first return to landlord. Twice the fixed rent, first return to tenant. Eight times the fixed rent, outlay on cereal cultivation. Eleven times the fixed rent, outlay on beetroot cultivation (1). Making 11 for the cereals, and 14 for the beetroot.

4. Average yield per hectare, as determined at the time of the contract:

Wheat	28 quintals	60 frs.
Oats	30 "	62 "
Winter Barley	32 "	60 "
Beetroot	26 tons	100 "

5. Average official prices, as determined at fixed periods, in accordance with the official reports:

6. Calculation of excess profits.	
(a) Wheat: 28×60	1680 frs.
Outlay and remuneration of capital (11×150)	1650 "
Difference	30 frs.
(b) Oats 30×62	1860 frs.
Outlay and remuneration of capital (11×150)	1650 "
Difference	210 frs.
(c) Winter barley 32×60	1920 frs.
Outlay and remuneration of capital (11×150)	1650 "
Difference	270 frs.
(d) Sugar beet 26×100	2600 frs.
Outlay and remuneration of capital (14×150)	2100 "
Difference	500 frs.

7. Sums admitting of apportionment per hectare.

Wheat	30 frs.
Oats	210 "
Winter Barley	270 "
Sugar beet	500 "
	1010 frs.

8. Apportionment: One-third to the owner on 4 hectares = $\frac{1010}{3} =$

336 francs. On the hectare $\frac{336}{4}$ francs = 84 francs.

Rent $150 + 84 = 234$ francs per hectare.

The excess of the yield over that specified in the contract goes to the tenant: the latter thus has an inducement to produce up to the maximum. This is also an advantage to the landlord, in that he sees his lands properly manured.

(1) The two last coefficients are subject to revision every three years. This revision is provided for in the contract, and entrusted to experts nominated at the time of the signing of the agreement.

The examination of the several types of leases on a sliding scale of rent leads M. Delos to formulate three general principles :

1. Lease on a sliding scale of rent does not obviate the fundamental necessity for fixing a figure as the basis of the charge per hectare. That is the fixed part of the rent, to which is added an extra variable payment acting as an index regulator. The fixed part of the rent must itself be the reflection of the general economic situation, not distorted by over estimates by either party to the contract. Its equitable basis is the net cost of farm-produce.

2. This initial rent being fixed with regard to an equitable apportionment of interests, the next point is to add the variable return, that is to say, to pool the total profits or losses made by the tenant in the course of his lease. In order to decide whether there has really been a loss or a profit, it is well to compare the net cost of each of the farm products with its selling price.

3. The third principle relates to the kind of farm products that should be taken as bases, according to the proportion of which the pool must be worked. It is important not to rely, as was done in the first experiments, on one or two products, such as wheat or beetroot, but on all the products of the holdings.

M. B.

HUNGARY.

REGULATION OF AGRICULTURAL LABOURERS' WAGES. — *Ämtliche Nachrichten des Oesterr. Bundesministeriums für Soziale Verwaltung*, No. 24, Vienna, 31 December 1921.

A Decree dated 24 February 1921, published under the law which conferred full powers on the executive during the War, lays down that the wages of agricultural labourers must be fixed in accordance with the results of the harvest and the threshing by free consent of both parties. If no agreement can be come to, and work presses, the principal official of the district is empowered to fix the wages for the different kinds of work and for the different seasons for the period of a year. The regulation of wages may be made for whole districts or for single localities. Before the fixing of the wages three representatives of the employers and three of the men must be heard. The wages when fixed are binding on both parties. Infringements are punishable with imprisonment or fine.

LAND SYSTEMS

MISCELLANEOUS INFORMATION RELATING TO LAND SYSTEMS.

LITHUANIA.

LAND REFORM LEGISLATION. — *Neue Zürcher Zeitung*, No. 304. Zurich, 7 March 1922.

On 15 February the Constituent Assembly of Lithuania finally passed after the third reading the bill for land reform. According to this law the maximum extent to be retained by landholders is fixed at 80 hectares. All held in excess of that is requisitioned by the State and added to the State lands. So long, however, as the large estates are not yet divided up, farms of not more than 150 hectares will remain untouched. Compensation is fixed for expropriated land within a maximum limit of 480 marks per hectare. No compensation is payable: (1) if the land in question is assigned to officers under a special law; (2) if the soil is unproductive; (3) if the land is not being properly managed; (4) if the property in question belongs to persons who have acted in a manner prejudicial to the independence of Lithuania and have voluntarily placed their services at the disposal of an enemy country.

For the time being the law is not applicable to foreigners (*i. e.* persons who formerly under the Russian rule possessed lands in Russia and were then regarded as foreigners). They are allowed to realize their property within three years. If this is not done their goods will be disposed of in accordance with the general provisions of the law. Land not properly managed will be requisitioned even in the case of foreigners.

M. T.

RHODESIA (BRITISH COLONY).

OWNERSHIP AND MARKET PRICE OF LAND IN SOUTHERN RHODESIA. — *Rhodesia Agricultural Journal*, Salisbury, June 1921.

In a Memorandum on the Cattle Industry of Southern Rhodesia, published in the *Rhodesia Agricultural Journal* of June 1921, there appears a detailed tabular statement, specially prepared for the Memorandum, showing the ownership of land in Southern Rhodesia. Of this statement the following table is a summary:

Southern Rhodesia: Ownership of Land.
(Approximately as at 1 January 1921).

	Matabeleland	Mashonaland	Total	%
	(acres)	(acres)	(acres)	
Total area.	45,750,400	52,327,920	98,078,320	
Area unalienated.	25,081,049	20,220,124	45,301,173	46.19
Native reserves	6,833,575	12,626,221	19,459,796	19.84
Privately owned land:				
Area used for general farming	2,233,492	4,832,608	7,066,100	7.21
Area used for cattle raising	4,561,389	7,227,488	11,788,877	12.02
Area unoccupied.	6,336,984	6,417,334	12,754,318	13.00
Alienated land unsurveyed	654,291	898,715	1,553,006	1.58
Area of townships and commonages	49,620	105,430	155,050	.16

From this table it appears that of the entire territory 46 per cent. is still unalienated; such land, according to a recent decision of the House of Lords, is regarded as Crown land. Approximately 20 per cent. is set aside definitely and in perpetuity as native reserves. A small fraction, .16 per cent., is assigned to townships. The remainder, about 33 per cent., is privately held by Europeans for farming purposes. This latter area, amounting in all to 33,162,300 acres, has been further classified, and it is found that 57 per cent. is actually in occupation, about 4.6 per cent. is unsurveyed land in course of transfer, and the rest, over 38 per cent., is held by absentee owners, both companies and individuals. Of late a tendency has been shown in some quarters to realize the unearned increment in value of idle and vacant land, and these areas are likely soon to pass into the hands of those who will beneficially occupy them.

The market price of land in Southern Rhodesia has constantly advanced, and of late more rapidly. The figures given below cannot be regarded as fixed, and are likely soon to be exceeded. Ranching land sold in large blocks, essentially pastoral country not at present adapted for smaller subdivision, is generally procurable at from 5s. to 10s. per acre; however, instances are quoted of ranching blocks offered at 3s. and 4s. per acre, and other land, also pastoral and not described as suitable for cultivation, at 12s. 6d. up to 20s. and 25s. per acre. Land suitable for arable farming, with possibly some improvements or special advantages, costs today from 20s. to 60s per acre, and in some cases as high as £5 has been paid. In the case of developed farms the value of homesteads, fencing, orchards, etc. must be taken into consideration. Taking the sand veld as a whole, examination of current prices shows a large range of from 5s. to 15s. per acre. For corresponding farms on the red soils the limits are from 10s. to £5 per acre, most varying between 15s. and £1.

W. E. H. L.

RUSSIA.

THE AGRICULTURAL HOLDINGS OF THE SOVIETS. — *Экономическая Жизнь* (*Economic Life*), Nos. 25 and 46, Moscow, 2 and 26 February 1922.

According to the original programme of 1918, all large estate privately owned and cultivated intensively, also all experimental stations, had to be regarded as Soviet agricultural holdings (*sowchosi*). But in process of time there were also added to the *sowchosi* many other private estates of which the peasants had not as yet taken possession. In November 1921, according to a statistical note of the Commissariat of Agriculture there existed in 41 governments of European Russia 24,391 *sowchosi*, with an area of 2,124,000 desiatines: in Siberia and in the contiguous zones 906 *sowchosi*, while the *sowchosi* of the Ukraine amounted to more than one million desiatines. The average extent of a *sowchosi* is calculated at 377 desiatines with an average of 45 labourers. The yield of the Soviet holdings has been up to now about half of what it might have been on a up to date system of cultivation and apart from the disastrous effects of civil war. The *sowchosi* system is as a matter of fact undergoing reorganization, and about 1,200 holdings with an area of 800,000 desiatines have been selected for a technical experiment in changing the system of cultivation.

M. T.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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Co-operation and Association

GERMANY.

THE CAPITALIZATION OF RURAL CO-OPERATIVE SOCIETIES (1)

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Before proceeding to discuss the question of the capitalization of rural co-operative societies, we must lay down some fundamental conceptions. The German juridical doctrine recognizes as "Genossenschaften", all independent societies having a corporate existence other than the State and the Communes. To these "Genossenschaften," in the widest sense of the word, belong capitalist companies (of which the share companies are the most important form), co-operative societies based on the real property of the members (*Realgenossenschaften*) and co-operative societies composed of individuals independently of the possession of real property (*Personalgenossenschaften*). The *Realgenossenschaften* are for the most part compulsory associations. A special law regulates the admission of members and the juridical relations of the members to one another and to the association; often, too, the method of conducting the business and the powers of the public authorities to make regulations for the association are determined in advance. In some cases the right of the public authorities to supervise the associations is also contemplated. Amongst the co-operative societies of this kind are the societies for drainage and irrigation. The wish of the individual to belong to the society and to derive benefit from

(1) The question of the capitalization of German co-operative societies has been dealt with at length by the author of this article in his book *DIE FINANZIERUNG EINGETRAGENER GENOSSENSCHAFTEN*, published in Berlin in 1921, under the auspices of the *Vereinigung wissenschaftlicher Verleger*.

it or not has no special importance in these cases. In the interests of the community, the individual for whose advantage the society is formed is compelled to become and to remain a member. And the compulsion reaches such a point that the lands on which the society conducts its operations continue to belong to it even if they change hands, so that the new owner becomes compulsorily a member, while the original owner, when he transfers the property, withdraws from the association.

The "free" co-operative society, on the other hand, does not owe its formation to any compulsion. It cannot be a *Realgenossenschaft* and it is not usually a capitalist company, but is a *Personalgenossenschaft*. The persons who compose it, the members, are its supporters and its object is to serve its members and, in its turn, it is served by the capital, whereas in the commercial company (of which the typical form is the share company) it is the capital which commands. In some special cases a "free" co-operative society is established under the juridical form of a share company, but it usually assumes the form of a co-operative society registered under the Law of 1889 (*Gesetz betreffend die Erwerbs- und Wirtschaftsgenossenschaften*). The registered co-operative society is the form of undertaking adapted to the combination of persons economically weak. It allows such persons to develop a powerful economic action, to utilize the means of capitalistic activity and at the same time protects them against the harm which may result from it. The co-operative society is a potent instrument for individual initiative, it promotes and strengthens in its members the consciousness of their own liability and trains them in independent management. The co-operative society puts self-interest at the service of the community.

In this article we deal only with the free rural co-operative societies, that is the co-operative societies which serve the population of the country districts. Amongst these there are many agricultural co-operative societies which aim exclusively at serving the agriculturist (co-operative dairy societies, co-operative vine-growers' societies, co-operative threshing societies, etc.), but there are others which work in the interests of the rural population as a whole, such, for example, as rural credit societies (loan banks, Raiffeisen societies), co-operative societies for the supply of electricity, etc.

The rural co-operative societies may be divided into two groups - the co-operative credit societies and the so-called co-operative trading societies.

By capitalization must be understood the supply of capital and distinction must be made between the supply of capital for the working of the society itself and the employment of capital in the working of other undertakings.

1. THE SUPPLY OF CAPITAL FOR THE SOCIETIES' OWN WORKING

The capital invested in a co-operative society, as in any other undertaking, may be either "owned" or "borrowed" capital. The owned capital, which consists of the foundation capital (paid up shares) and the

supplementary capital (reserves), is also known as the "undertaker's capital"; it is this capital which bears the risks, serves as the basis of credit (in part), is the guarantee fund for the creditors and is that part of the total capital and total assets which is not burdened with indebtedness. The borrowed capital comprises all the liabilities of the society.

A society may obtain capital for its own working in three ways: it may obtain owned capital, or borrowed capital, or both owned and borrowed capital. It is the last of these methods which is most often recommended.

The simplest and safest method of capitalization is by means of owned capital. The members pay an entrance fee and, either immediately or as soon as the need is felt, pay up the shares, and thus supply all the capital which the society requires. Recently several societies for the supply of electricity have been formed of which the capital has been obtained almost entirely through the entrance fees. Capitalization by means of entrance fees (which are not repaid to the members when they withdraw from the society) is only possible when the societies partake of the character of a society based on real property, when withdrawal takes place on the occasion of the transfer of the property and when at the time of the sale of the property the capital invested in the society in the form of entrance fees is included in the purchase price.

Capitalization with owned capital only is not possible in all cases, and, in particular, it is not possible if the capital required is large, the number of members is small and the members are not in a position to supply the large sums which would be necessary. In this case, borrowed capital must be obtained, which will be gradually repaid as new members join the society or as reserves are built up out of the profits. The creditor has rights over the borrowed capital; he demands interest and even a commission; he requires fixed instalments of repayment or he has the right to demand the repayment of the sum lent on giving notice. Agreements must, therefore, be made with the creditor to protect the society from inconvenient demands for repayment and from the obligation to pay too high annual instalments, so that the society may carry on its work undisturbed and not be threatened or even placed in the impossibility of continuing its existence by the claims and action of the creditor.

Capitalization with borrowed capital only, especially at the time of formation, and the gradual replacing of the borrowed capital by reserves to be built up little by little is forbidden by the Law on Co-operative Societies.

§ 1. OWNED CAPITAL, AND THE METHODS OF OBTAINING IT.

(a) *The Fundamental Legal Principles.*

In the Law on Co-operative Societies the conception of owned capital does not figure; it only speaks of its constituent parts, the foundation capital and the supplementary capital, this latter under the name of "reserve

fund" (*Reservefonds*, § 7, No. 4) or of "other capital" (*sonstige Vermögen*, § 73). The foundation capital is spoken of under the name of "shares" (*Geschäftsanteile*), — nominal value — and of "paid-up shares" (*Geschäftsguthaben*) the effective foundation capital formed by the payments of the members and in certain cases by the assignment of dividends to the paying up of shares. The expression "responsible capital," (*verantwortliches Kapital*), which has become usual, is not applicable to the owned capital of the society, as it results from the balance sheet. To meet the obligations of the co-operative society not only the owned capital of the society is liable but also the assets of its members (obligation of liability and of making supplementary payments in accordance with § 2 of the Law on Co-operative Societies). The amount of the assets of the members which is so liable is not known and cannot be known with any precision. In the case of co-operative societies with limited liability, it may reach as a maximum the sums which the members have undertaken to pay (§ 139 of the Law on Co-operative Societies), but it cannot readily be ascertained to what extent this amount is realizable. The amount to which the members are liable in the case of societies with unlimited liability or with liability to make unlimited supplementary payments embraces their entire possessions, of which it would be difficult to ascertain either their absolute value or the extent to which they could be realized.

(h) *The Shares and the Payments on them.*

The Law on Co-operative Societies requires (§ 7, No. 2) that in the rules of the society it shall be laid down up to what amount each member may take shares in the society, and what payments must be made on the shares. These obligatory payments must be determined, as regards their amount and the time of making them, up to a total amount of at least a tenth of the shares. If the rules oblige the members to pay more than a tenth of the shares, but do not fix the amount of these additional payments or the time when they are to be made, the decision in these matters rests with the General Meeting (§ 50 of the Law on Co-operative Societies). The members of co-operative societies with limited liability (§ 119) or with liability to make unlimited supplementary payments (§ 126) can only take one share each; in the societies with limited liability, members may take more than one share, if that is permitted by the rules and provided that the number of shares which any one member may hold is fixed (§ 134). However, if a member holds more than one share, all his shares except the last must be covered by payments or by an assignment of dividends (§ 136). The payments made by a member on his share (or shares in the case of societies with limited liability), together with any dividends which may have been assigned to the paying up of shares, or less any losses (§ 19), form the member's credit in respect of the share capital (*Geschäftsguthaben*).

(c) *The Legal Reserve Fund.*

The legislative provisions regarding the formation and employment of the reserve fund are not numerous. In § 7, No. 4, the Law on Co-operative Societies prescribes the formation of a reserve fund having for object "to serve to cover a loss shown by the balance sheet". The rules of the co-operative society must contain provisions relating to the formation of this reserve fund, that is, laying down the method of its formation and, in particular:—

1. The percentage of the net annual profit to be allocated to the reserve fund.

2. The minimum amount which the reserve fund must have reached before the allocation of this percentage of the net profit can be discontinued.

The rules may also lay down that no portion of the profits shall be distributed but that the whole shall be carried to the reserve (§ 20).

Members who withdraw from the society have no claim upon the reserve fund (§ 73).

If when the co-operative society is dissolved the reserve fund, after the creditors have been satisfied, remains available, it can be treated as part of the capital assets of the society.

§ 2. THE ECONOMIC IMPORTANCE OF THE OWNED CAPITAL.

As has been indicated, the owned capital sustains the risk and the credit and serves as a guarantee fund for the creditors. The members contribute the share capital in part by their payments, in part by the allocation of dividends to this purpose and since they are themselves the persons with whom the co-operative society does business, even the profit which serves for building up the reserve fund is at least in part contributed by them.

The members supply the foundation capital not so much in consideration of the dividend which they may hope from it, but in the expectation of being able by means of their membership in the society to promote, improve, complete, render more economical or more lucrative, insure, etc. their own business or domestic affairs. The co-operative society is created not by capital in search of investment, or of speculation, but by the desire of the members to improve their position, economically or technically.

For the conduct of the business the importance of the owned capital consists in the first place in the fact that it does not burden the undertaking with interest and so diminishes the working expenses. When a sufficient sum has been reached, which, it is true, can only be reached after the lapse of a certain time, but which ought eventually to be reached, the owned capital renders the co-operative society independent of its creditors, of the conditions of the money market and of capital, and allows it even to incur losses without the members feeling any ill effects from them.

Not all parts of the owned capital have the same importance for the working of the society. The importance is greater in the case of the various reserves and sums set aside, in respect to which the retiring members have no claims, than in the case of the paid up shares which must be repaid to the retiring members, always supposing that they are not necessary to cover losses.

The desirability that the co-operative society should be financially independent, makes it seem opportune that the value of the shares should be fixed at a fairly high figure, that the payments upon them should be made rapidly and that, in addition, the whole or a large part of the net profits should be carried to the reserve. However there are considerable difficulties in the way of this. In fixing the amount of the shares and of the payments to be made upon them account must be taken of the ability of the members to make such contributions, while the prices charged, upon which the making of a net profit depends, must be fixed in accordance with the state of the market. These difficulties in the way of a rapid accumulation of capital, which result from economic conditions, are increased by psychological factors. It is a curiously widespread idea, profoundly rooted in the minds of many members of co-operative societies, that the co-operative society ought to support its own members, but that it cannot claim any support from them in return. Hence arises that unjustified aversion from the formation of the capital, whether by payments on the shares or by increasing the reserve funds.

In consideration of the fact that, save in exceptional cases, the members join the society to do business through it, it would be desirable that the shares they hold should be proportionate to the extent to which they participate in the business of the society. It is not, however, easy to introduce a constant, fixed relation between the participation in the capital and in the business. It is, indeed, practically impossible and moreover there are legislative provisions which are opposed to it. In the co-operative societies with unlimited liability or with liability to make unlimited supplementary payments; a member cannot acquire more than one share, but must hold one share (§§ 119 and 126); only in the co-operative societies with limited liability is it permitted that the member shall hold more than one share (§ 134), but the diminution of the number of shares subscribed is not allowed. Hence the legislative provisions render it impossible for the member to participate in the capital to an extent varying with his participation in the business, which by its very nature may alter considerably.

Every member must withdraw from his own business or from the free capital which he has at his disposal, or may even have to obtain at first by means of a loan, the money with which to pay for shares in the co-operative society. Hence arises a certain unwillingness, not altogether unjustified, to subscribe capital or a tendency to do so to a less extent than would be effectively possible. When the amount of capital which a member can subscribe is not large, the willingness to subscribe may be increased if high dividends are not only expected but are actually paid. But this

policy of paying high dividends easily leads to the closing of the co-operative society to new members and to its virtual transformation into a profit-making company, even if the change of juridical form does not take place or only takes place later. In many cases co-operative societies are even absorbed by commercial undertakings and that as a result of happenings which are worse than merely non-co-operative.

The willingness of the members to subscribe capital may be encouraged if the co-operative society offers adequate advantages in exchange ; this must be done from the start by means of a clear programme which does not consist merely of empty promises but is economically possible to carry out.

The willingness to subscribe capital depends further on the ability to do so, a factor of great importance amongst the members who are weakest from the point of view of capital. Account was specially taken of the ability to obtain the necessary means by the legislative provision which allows shares to be paid up by instalments. Of this provision free use should be made, but only when it is economically necessary. To allow a partial payment when the complete payment is possible would be a mistake. The argument often put forward against a substantial participation in the capital that the liability serves instead of such participation is not acceptable, either economically or juridically.

When payment by instalments is necessary in consideration of the small capacity of the members to subscribe capital, the amount of the compulsory payment should be fixed at as high a figure as possible — it is in consideration of those who are economically weakest that the amount of the minimum payments is fixed — and the instalments should be fixed at a moderate figure, and they should be made payable by periods which correspond to the ability of the weakest members to subscribe and in general coincide with the periods in which their income is received, for example weekly for workmen, monthly or quarterly for employes and so on.

In the need of the undertaking for capital on the one hand and in the restricted ability of the members to subscribe on the other hand, there is a limit to applying the co-operative principle. If between the need of capital and the ability to subscribe there exists a gap which cannot be bridged, it will not be possible to adopt the co-operative form, unless in special cases help can be obtained from persons of larger means. This procedure can only be adopted in isolated cases ; it cannot and will not be the basis of a large development of the co-operative idea and tends, even when the juridical form of a registered co-operative society is maintained, rather, in the direction of charity or of institutions of public utility.

If the use of the co-operative form is desirable in the interests of public economy, but impossible owing to the divergence between the need for capital and the financial capacity of the members, State aid, in whatever form it may be applied, may be not only desirable but even necessary.

The right to require the payment of entrance fees is indisputable and in any case they exaggerate who maintain that this practice is contrary to the spirit of co-operation. There is no doubt that the co-operative

society, once formed, has the right to ask from new members the payment of an entrance fee, as a form of compensation, as it were, for the work thanks to which, prior to their admission, the foundations of the society were laid and the society was placed on a solid basis. The entrance fees, as has been noted, may even be considered as a possible financial basis for a co-operative society.

If the entrance fees are fixed at so high a figure that they exceed the ability of the members to pay them, they bar the way to the entrance of new members. This is a provision which may be regarded as the first step in the direction of transforming a co-operative society into a profit making company. It is an illusion, as has been demonstrated in many cases in practice, to believe that high entrance fees prevent the withdrawal of members, since they do not wish to renounce their money. Experience has shown that high entrance fees prevent not the withdrawal but the entrance of members.

The fines exacted from members for breaches of the rules and regulations can never be taken into consideration as a factor of any importance in the building up of the reserve fund; if they were an important factor, it would be an indication of the decadence of the society.

In the same way voluntary contributions only in exceptional cases help largely to increase the reserve fund. In some cases, contributions are received from benefactors, persons who assign a sum to the co-operative society, etc.; in others, the contributions may come from the public authorities (the State, districts, communes, etc.). But even these receipts only rarely are an important factor.

In exceptional cases, persons who are not members of the co-operative society contribute otherwise than voluntarily to the reserves, as in the case of penalties decided by arbitration for non-fulfilment of contracts, and similar cases. These contributions, too, cannot have any considerable importance.

From the point of view of private economy and from the co-operative point of view, it might be argued that the object to be aimed at in the constitution of the owned capital is that it should be of such an amount that the reserves can bear the highest possible risk which the society can incur, so that in fact the liability of the members is eliminated. This object is impossible of attainment. A long series of years would have to pass before such large reserves could be accumulated; they would have to be equal not only to the working capital required but, in addition, to the sums for which it had assumed liability in relation to other co-operative societies. Nor would the object aimed at be attained even then, inasmuch as there would still be a risk in the investment of that part of the reserve funds not required as working capital, and it would be necessary to accumulate another reserve fund to cover this risk. It would be fantastic for a society to set before itself such an aim.

Without losing sight of realities and of the actual possibilities of development, it may be said that the owned capital ought to reach such a sum that the co-operative societies can dispense with borrowed capital;

the accumulation of reserves beyond this limit would make it possible to reduce the share capital. Even this object is in opposition to the development of co-operative societies hitherto observed. The application of this conception leads to "foundation capital" (*Stiftungsvermögen*), to the institution of public utility, to the possibility of eliminating the liability of the members, whereas the tendency at the present time is far more likely to be in the direction of the profit-making company. Besides it would be an attempt to decide upon the problems which present themselves regarding questions which must be solved not by the present generation but by future generations. The elaboration of the problems which arise lead, across economic problems, to the co-operative idea as a universal conception.

Raiffeisen's idea of a capital which cannot in any circumstances be distributed amongst the members, called by his followers the "constituent fund" (*Stiftungsfonds*) does not conflict with the present economic organization and has objects capable of being realized. The "constituent fund" should reach such an amount that it will suffice as working capital. This rule has been interpreted as meaning that the constituent fund must be of such an amount that the revenue derived from it (that is the return from its employment) is sufficient to cover the expenses of the society. (Raiffeisen contemplated the "constituent fund" only in the case of rural co-operative credit societies and savings and loan banks, but he desired their development into village co-operative trading societies). The great mass of rural co-operative credit societies are still very far from having attained this object.

Confining ourselves to facts and taking account of the necessarily slow process of building up the owned capital in the case of co-operative societies, we must lay down, as the necessary minimum in respect to owned capital, the following principle: If a co-operative society cannot be financed by means of paid-up share capital and entrance fees, it must obtain from these sources at least such an amount of owned capital as will suffice at the start as "basis for the extent of credit economically justifiable". It will depend on the source of the credit and upon the conditions of granting it, what is the minimum amount of shares necessary and what must be the mutual relations between the shares and the sums for which the society is liable and between the sums for which the society is liable and the estimated capital assets of the members. Carrying on the business with borrowed capital presupposes that the assets are to some extent liquid, and the higher the ratio of the borrowed capital to the total capital the greater the extent to which the assets must be liquid. But these are not the only factors which determine the minimum of owned capital which is necessary. For the estimation of the credit and hence for building up an owned capital, two principal systems are adopted amongst co-operative societies — the system of centralized co-operative societies and the system of societies which are not centralized. These latter have no support except in themselves; they must themselves find access to the money market and stand in direct relations with the third

parties who become their creditors. The centralized co-operative societies on the other hand are combined into central banks which balance the need of capital of some of their members against the surplus capital of others and these societies only occasionally have direct contact with the money market. Co-operative societies which are not affiliated to a central bank are, therefore, compelled to accumulate owned capital to a larger extent than co-operative societies which are so affiliated; in fact, on behalf of these latter it is the central bank, with its own owned capital, with the sums for which is liable, and with its wide basis of risk, which figures on the money market.

But in the case of centralized societies it is not only the requirements of the money market which determine the safety of the assets and the extent to which they must be liquid (the two factors which, in the first instance, render owned capital necessary); they are even more strongly influenced by the internal sources of capital of the co-operative organization itself and the extent to which the assets must be liquid in the interests of those sources.

The principal source from which the capital of the German co-operative organizations is derived is the savings deposited with the co-operative credit societies affiliated to them. The proportion of liquid assets which has to be insisted on in the interests of the depositors is the decisive factor in determining the minimum amount of owned capital which a co-operative society belonging to the organization in question must possess.

That the owned capital of the co-operative societies should be very small at the start and should subsequently increase little by little is due to the economic conditions of the members. Thousands of small traders, manufacturers or farmers work with a very small capital of their own and sometimes with excessive indebtedness. They have however a reason for existence and overcome their indebtedness in so far as their activity is based not on the possession of capital but upon their own labour; they transform the financial results of labour into capital and in their co-operative societies they find help and an assured existence. It can readily be understood that co-operative societies, the members of which are drawn from the same social classes, can only put together capital slowly and that only co-operative societies which have been in existence for some time can accumulate capital with any rapidity.

§ 3. BORROWED CAPITAL, AND THE MEANS OF OBTAINING IT.

All economic development, whether of the individual, of the communes or of the State has rendered necessary the organization of credit. The individual's need of credit has given rise to the formation of co-operative credit societies. The impossibility for the manual worker, for the farmer or for the retail trader to develop his business without capital and without credit, urges him towards co-operation, makes him realize its necessity, almost compels him to combine co-operatively. The co-operative society, in turn, has need of capital. What the member cannot give as capital he

urnishes in the form of credit. The credit of the individual, of the man of modest means, though not appreciated by investors or on the money market, gives to the co-operative society the basis on which to obtain borrowed capital. The credit of the co-operative society is formed by the combined credit of the individual members; it is not the sum of the small individual credits, but rather their multiple. But credit alone does not represent any permanent financial basis, and it is precisely this fact which for a long time has been imperfectly understood by many co-operative organizations. Credit must be accompanied by owned capital, to a small extent at first but increasing little by little until it reaches such an amount that the co-operative society, though closely linked with the money market, becomes independent of it within the limits rendered possible and advisable by its business, its aims and its means. The co-operative society must be able to enter the money market on an equality with all the other lenders or borrowers of money and this it can only do if it does not confine itself to merely linking itself with a co-operative organization of a higher degree but itself possesses capital.

Co-operation is formed by persons, not by money, not by capital. The credit which persons are in a position to guarantee is, as has been remarked, the basis on which the credit of the co-operative society rests. It has recourse primarily to personal credit and only in special cases to credit based on real property.

(a) *Personal Credit*

The greater part of the borrowed capital employed by rural co-operative societies is obtained by means of personal credit. The most important forms of personal credit are the savings deposits and the so-called *Haftsummenkredit* (credit consisting of the sums for which the members can make themselves effectively liable). Deposits on current account are not a frequent source of credit, nor is credit on the security of bills. The deposits of public funds are few in number, as also are loans from the State and *Zwischenkredite*. Credit allowed on goods purchased is important only in the case of co-operative trading societies.

The *savings deposits* of the co-operative credit societies are the principal source of capital for the whole of rural co-operation in Germany. They must at the present time amount to six or seven thousand millions of marks. In round figures there are 19,500 loan banks which act as savings banks, having assumed the task of encouraging the sense of thrift amongst the rural population, more particularly amongst young people, servants and workers. Many small savings institutions serve the same end, such as the *Pfennigsparkassen*, the school savings banks, home money boxes, savings-books for baptism, etc. A characteristic quality of these savings deposits, which is of great importance in relation to the capitalization of the rural co-operative societies is their comparative stability. While the deposits in the banks vary considerably and therefore require a large amount of liquid assets to meet withdrawals, the savings

deposits in the co-operative societies vary little and the withdrawals have been more than counterbalanced by new deposits which are continually flowing in, so that the aggregate deposits in hand have increased from year to year. The stability of the deposits is explained by the fact that the greater number of the depositors make their savings with a definite purpose (to give dowries to their daughters or to purchase land) which they may only be able to carry out after a long period of time. The interest, too, is not withdrawn, but is added to the capital. Temporary deposits are also made (deposits on current account) and they have notably increased in recent years, but it would be well if they increased still further, in view of the desirability of extending the system of payments without any cash actually passing.

The *Haftsummenkredit* holds a special position amongst the various means of obtaining borrowed capital. It is a speciality of the co-operative credit system, was conceived by Raiffeisen, the founder of rural co-operation, and was afterwards developed by the *Preussische Zentral-Genossenschaftskasse*. The fundamental conception of this system of credit is as follows: The co-operative societies (for the most part co-operative credit societies in South and West Germany) with which has been deposited more money than they require for their working, place their surplus capital in their central banks (of which we shall speak later), which employ it in granting credit to the co-operative societies which have need of capital. Since societies which have need of credit generally have little owned capital, this cannot serve as the security for any large loan. A particularly ingenious method is adopted for ascertaining the sums (*Haftsummen*) for which the members of a society would be liable in respect of the obligations assumed by them in case of the liquidation of the society, an estimate is made of the amount which could be recovered from them and the credit is fixed accordingly. This system has proved satisfactory for more than forty years in the German co-operative movement, particularly amongst the rural co-operative societies and has contributed in a notable manner to the powerful development of co-operation.

Credit in the form of overdrafts on current accounts is not usual. In isolated cases it is given by banks to the great central co-operative societies. Credit on the security of hills, too, has no great importance, since the great mass of German farmers is not accustomed to have recourse to it. The investment of public funds (funds belonging to communes, to public institutions, etc.) in the co-operative societies only occurs to a very small extent, since such investments are not considered suitable for trust funds, and public funds must as a rule be invested in the same type of securities as trust funds. Occasionally even the States or Provinces give credit to co-operative societies, particularly to trading societies, but such advances are not generally large in amount. Only in a few cases, in which there are special reasons, can such advances be really considered as the provision of capital, as for example, in the case of the formation of co-operative grain warehouses in the last decade of the nineteenth century, and in Bavaria when the growers of fruit-trees of Eßeltrich (near Nuremberg and Erlangen)

had their business threatened by the legislative prohibition to sell young fruit trees on their own premises and were compelled to combine in a co-operative society for the cultivation of fruit trees in order to establish a nursery on modern lines. Temporary credit (*Zwischenkredite*) is granted by the *Preussische Zentral-Genossenschaftskasse* to co-operative societies when a mortgage loan has been granted to them by a mortgage credit institution, but the issue of the loan is delayed by the necessity of first completing the formalities connected with the registration of the mortgage in the Land Register or because it is necessary to await a favourable moment for the sale of the mortgage bonds. Credit is in a few cases allowed on goods purchased. The central trading societies allow it to the local trading societies. When money is scarce the local societies must give bills to the central societies in order that these latter may obtain money by discounting them.

(b) *Credit on the Security of Property.*

Mortgage credit has no great importance as a source of capital for rural co-operative societies. The mortgage banks only make small advances on the security of buildings erected for specific purposes (co-operative dairies, distilleries), so that the *Haftsummenkredit* must usually suffice for the purposes of obtaining capital. Moreover the mortgage credit institutions only make loans to agricultural co-operative societies when they have buildings which serve for carrying on their business. This principle is harmful to the co-operative grazing societies, which do not usually possess buildings and, therefore, have difficulty in obtaining capital. If the co-operative credit societies grant loans, with special guarantees, to farmers who are heavily indebted for the purpose of enabling them to pay off their mortgages, they can, when money is scarce or in special circumstances, hand over their rights to the Prussian Central Co-operative Bank and thus render liquid, in case of need, the capital invested. The deposit of securities has little importance as a means of obtaining credit. The amount of the securities held is not great; during the War it increased somewhat, but it is already again diminishing. The smallness of the amount of the securities held is explained by the fact that the societies have been urged for decades by their central banks and their federations to deposit their surplus funds in the central banks rather than invest them in securities. The pledging of goods only occurs exceptionally; for example the co-operative grain warehouses, the co-operative vine-growers' societies, etc., may obtain credit by this method during the period when they are making their purchases of produce. Even the handing over of rights as a security for credit rarely occurs and then generally in connection with loans for dismorgaging.

II. THE SUPPLY OF CAPITAL TO OTHER CO-OPERATIVE SOCIETIES.

In the supply of capital by a co-operative organization to other co-operative societies, all the suppliers of credit to that organization partici-

pate. However they do not in all cases give credit with the intention of supplying the societies with capital, but rather seek a temporary or permanent investment of their own capital. As soon as the capital becomes necessary for other purposes or can be invested on more favourable conditions elsewhere it is withdrawn. The danger that borrowed capital may be withdrawn causes the debtor to feel an anxiety, a want of security, and a continual uncertainty; it renders necessary the formation of liquid reserves which diminish the returns of the undertaking; it makes desirable the increase of the owned capital which depends both on the ability and willingness of the members to subscribe and on the returns of the undertaking (building up of reserves); it renders it advisable to grant particularly favourable terms to creditors who made advances for long periods; it compels the debtor to seek a cover (*Rückendeckung*); it eliminates recourse to the State and leads to mutuality, that is to the union of those who find themselves in the same or similar circumstances.

The money market has been for a long time closed to the co-operative societies. The *Reichsbank* for a time discounted the bills of the co-operative societies, but after the formation of the Prussian Bank it handed over to it the operations of this kind. The Banks decided only after many years to grant credit on the security of bills to co-operative societies and to discount their paper. The public saving banks first ignored the co-operative societies and then fought them.

This unwillingness on all sides to give them credit compelled the co-operative societies to seek aid amongst themselves. From Schultze-Dehlisch to Raiffeisen they learnt the necessity of finding on their own account the means of access to the money market, and created their own central banks; subsequently the State came to their aid and finally even the great Banks entered into business relations with them. But in regard to the supply of capital for investment they depend, now as they always did essentially on their own means.

The compensation between the surplus and the deficiency of money in the co-operative movement is carried out principally through the medium of the central banks created by the co-operative societies themselves. In the initial period of their formation, the object aimed at was to establish a compensation between the co-operative credit societies having a surplus of money and those which had not sufficient money. The latter originally found no one on the money market who would give them credit; the former could find no lucrative investment. Hence the idea of union between them arose very naturally. It was carried out both by Schultze and by Raiffeisen. After some fruitless attempts to establish a centre of financial compensation in the form of a co-operative society, Raiffeisen established one in 1876 in the form of a share company, under the name of the Central Agricultural Loan Bank for Germany (*Landwirtschaftliche Zentraldarlehenskasse für Deutschland*), of which the savings and loan banks formed on his system can alone become shareholders and must become shareholders if they desire to obtain advances from it. The shares are held in the name of the shareholders and the dividends cannot

exceed 5 per cent. ; one fifth of the net profit is allocated to the indivisible and divisible reserve funds.

The federations affiliated to the National Federation, with two exceptions, formed after the promulgation of the new Law on Co-operative Societies (1889) central banks for their area of operations under the form of co-operative societies with limited liability of which the co-operative societies which deposit money or obtain advances become members. The attempt to amalgamate these co-operative banks into a *Reichsgenossenschaftsbank* were not successful.

It has been already noted that in the initial period of the formation of central banks the object aimed at was to effect the compensation between those co-operative credit societies which had a surplus of money and those which had need of money. Then at any rate and even now on the part of many members of co-operative societies, the scope of the central banks was conceived as being this and nothing else. It was only gradually that experience showed that the problem of financial compensation was a problem not only of space but also of time and of quantity. It is not only the surplus and deficiency of money which has to be balanced (problem of space) but also the need of a temporary investment with that of credit for long terms (problem of time) and, lastly, there must be the balancing of the differences, that is satisfaction must be given both to the offers and demands even when they do not balance each other, that is when the offers exceed the demands or *vice versa* (problem of quantity). The compensation centres must be financiers and bankers. To this may be added that the task of being helpful and the fact that they cannot pursue any selfish end have rendered more acute in the case of the central banks the conflict which exists in all undertakings between safety, profitable employment and the necessity of having liquid assets. Experience in overcoming these difficulties was wanting, since the financial compensation centres were, as regards their objects, their organization and their management something absolutely new and their managers, as well as their councils of supervision, in early days often refused to avail themselves even of the experience of modern banking practice, fearing that it would lead them into taking up an attitude similar to that of profit-making companies.

The special difficulties of financial compensation in connection with co-operation and the obstacles which it encountered because these difficulties were not at first realized, were not, however, such as to render impossible a healthy development of the co-operative societies. Notwithstanding difficulties and obstacles and in spite of the want of success which occasionally occurred, it is unquestionable that without the central banks, the co-operative organization of farmers and artisans could not have had the development it has attained and that without centralized organization in the field of financial economy, the local societies would have been condemned, both in regard to their number and to the services they could render, to a miserable existence.

The co-operative societies belonging to the General Federation of German Raiffeisen Co-operative Societies (founded in 1877 by Raiffeisen) have

as their financial compensation centre the Agricultural Central Loan Bank for Germany founded by Raiffeisen in 1876. Its operations cover the whole of Germany, its headquarters are at Berlin and it has 14 branches and 30 agencies scattered over the whole country. The co-operative societies affiliated to the National Federation of German Agricultural Co-operative Societies do not possess a central bank, but each federation has its own bank. Each of the 28 federations, as also each of the central banks attached to them, confines its operations to one of the provinces of Prussia or to one of the States of the Confederation. The co-operative societies affiliated to the National Federation are therefore organized on a system of provincial centralization, while those affiliated to the Raiffeisen Federation are centralized on a national scale. However, even the co-operative societies belonging to the National Federation have a central organization for the whole country in the *Preussische Zentral-Genossenschaftskasse*. This institution is not a co-operative society, but a State institution which acts as the central bank of the central banks.

The central banks, inasmuch as they are financial compensation centres are also institutions for supplying capital to co-operative societies which have need of it.

III. THE RELATIONS BETWEEN THE SUPPLY AND THE EMPLOYMENT OF CAPITAL.

In the supply of owned capital the capacity to subscribe and the willingness of the members to contribute have decisive importance on the one hand (payments on shares) and the profitability of the undertaking and the recognition of the necessity of developing the owned capital on the other hand (reserves). In the supply of borrowed capital, on the contrary, the factors which decide the nature of the capital and the period for which it must be borrowed are the rules and customs of the money market, the estimate which the person who lends capital forms of the credit-worthiness of the borrowing society, the guarantees which it can give, and its promptness and willingness to pay what is due.

In the employment of capital, setting aside the questions of the good organization and good management of the undertaking, the decisive factor is the need which the undertaking has of capital, and the period during which the capital circulates forms the link between the obtaining and the employment of the capital.

In the case of borrowed capital there is a marked conflict of interests between the giver and the receiver of credit, a conflict which finds its solution in the conclusion of the credit agreement. The desire on the part of the creditor for a good return on his money, in so far as it is satisfied, diminishes the return of the borrower's undertaking. The wish of the creditor that his money should be safe limits more or less the debtor's faculty of disposing freely of it, and the necessity of being in a position to pay the debt has an influence on the employment of the capital and on the method of disposing of the money.

The circumstances above indicated are not fundamentally modified in any way, if the credit is granted by an institution of public utility or a co-operative society composed of the co-operative societies themselves (centre of financial compensation). The difference only shows itself slowly in regard to the pretension to return on the money lent, since such institutions do not exist for purposes of gain like the profit-making companies and can therefore put credit more cheaply at the disposal of the co-operative societies. But inasmuch as they are handling for the most part borrowed capital, even the financial compensation centres cannot reduce their requirements in the matter of security and the necessity of keeping liquid assets below those of the profit-making companies, and if in regard to security they act in accordance with the particular conditions of the co-operative societies (credit proportionate to the sums for which the members can make themselves liable), they must, however, take care that the existing guarantees are not otherwise employed and that they cannot serve for the satisfaction of the claims of other creditors (declaration that the guarantees serve exclusively as security for the loans granted). Often the creditor leaves it to the debtor to see that he has sufficient liquid assets, for the very good reason that neglect in this matter would threaten the very existence of the debtor (insolvency and its consequences). However, in view of the fact that particularly in the case of the co-operative societies with a central organization the rules for keeping a sufficiency of liquid assets are too easily overlooked, the co-operative federations have in their decisions laid down principles to be followed, and have issued orders and circulars and have given instructions to their Inspectors that on the occasion of their inspections they should give special attention to the position of the liquid assets of the co-operative societies.

From the external life of the undertaking, from its relations with its creditors, may be judged the influence of the supply of capital on its internal life, on the employment of the capital, on the profits of the undertaking, on the constitution of guarantees and on the building up of the necessary solvency.

Thanks to the internal relations which have been created between the co-operative credit societies and the co-operative trading societies, it has been possible to establish a solid and efficient credit system, standing upon its own basis, for rural co-operative societies. For the Raiffeisen co-operative societies, the *Landwirtschaftliche Zentral-Darlehenskasse für Deutschland*, also called the Raiffeisen Bank, provides access to the money market. The majority of the other central banks avail themselves for this purpose of State-aid through the medium of the *Preussische Zentral-Genossenschaftskasse*.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

'FRANCE

- I. THE GENERAL CONFEDERATION OF VINE-GROWERS. — VÉRAN (Jules): Nos enquêtes; La confédération générale des vignerons, in *Le Producteur*, Paris, April-May 1922.

The General Confederation of Vine-growers originated in 1907 in the economic crisis sustained by four large wine-producing departments, l'Hérault, Aude, Gard, and the Eastern Pyrenees. This part of the South, except for a few districts, is devoted in consequence of the lack of water to a single culture, that of the vine. Now the wine produced came to be sold at two francs a hectolitre, on account of adulteration practised on a large scale in two ways: dilution and sugaring. By dilution, that is to say addition of water, the number of hectolitres for consumption is increased; by the mixture of a certain amount of sugar, at a very low cost, with the must in fermentation, the alcohol content was increased, and thus more dilution was possible, and, further, with sugar and raisins artificial wine could be made at will.

It was to combat this state of affairs that the General Confederation of Vine-growers was formed. Article 4 of its Rules is as follows: "Its object is the union of the Vine-growers' Syndicates for the protection of their economic and agricultural interests.

"It will make it its business:

"(a) to use all its efforts to raise the price of wines to the level at which there will be a real remuneration to the grower;

"(b) to co-ordinate the efforts made by the affiliated Syndicates to suppress the practice of adulteration and artificial manufacture of wines;

"(c) to collect and spread information of value to growers and merchants on the state of the vintage, market conditions, and stocks existing on estates or in the trade;

"(d) to encourage by every means in their power the spread and development of mutual credit societies;

"(e) to bring about in all the centres of vine-growing in France, the formation of Regional Syndicates of Vine-growers and to cause them to be affiliated to the present Union;

"(f) and generally to deal with all questions relating to the working of the federated Syndicates."

The Syndicates affiliated to the Union are five in all: the Vine-growers' Syndicates of Beziers, Carcassonne, Montpellier, Narbonne and Perpignan. The five syndicates have as chief aim the detection of adulteration and the prosecution of any legal proceedings to which that may give rise. Membership is open to owners of vineyards, rent-paying or produce-sharing tenants, those having usufruct or others possessing a

claim to the vintage; workers in the vineyards; traders and dealers in wine; persons following allied occupations who assist in the production and the sale of wine. Each syndicate undertakes only to put on sale genuine wine, that is to say wine made exclusively by fermentation of the juice of fresh grapes.

All the members of a syndicate residing in the same commune form a communal section. Every section has the duty within its own area of detecting adulteration and reporting it to the administrative council of the Syndicate; of ensuring the execution of the decisions of the General Assembly and of the Administrative Council of the Syndicate; of managing the capital belonging to the section; and of directing the subsidiary services that the section can form apart from the syndicate.

The Confederation, which numbers at present 75,000 members, has taken steps, at different times, to institute enquiries in Italy, in Spain, in Belgium, in England, both on the position of viticulture and also on the sale of wines. It has also taken part in numerous exhibitions, in France and abroad, for example in London, Brussels, Liège, Ghent, etc. Immediately before the declaration of War it was taking part in the Lyons exhibition, to which it sent more than 4,000 samples.

In the course of the War the public authorities appealed to the delegates and the organizations of the Confederation, and they took their share of the work of certain special commissions. When the requisition of a part of the vintage was ordered so as to ensure the troops being supplied with wine, the sections of the Confederation used their interest with the members to get them to accept in the national interest the low prices offered by the Commissariat. On the other hand the Confederation through its organizations distributed of its own accord and as a free gift more than 100,000 hectolitres of wine to the troops and to the sick in hospital. Actuated by the same sense of the common responsibility, the Confederation has organized on different occasions subscriptions in aid of victims of storms, hail or floods: in 1920, it opened a subscription on behalf of the vine-growers of Champagne, ruined by the invasion as they were, which produced more than 150,000 francs.

The work of the Confederation continues however to be essentially directed against adulteration so that the genuine article may be protected. From the time of their constitution, the syndicates nominated sampling agents, and applied to the prefects to commission them. By an arrangement with the Confederation of Vine-growers of the South-east, formed about the same time, France was divided into six sectors in which the syndicates exercise oversight. The Confederation employ 32 agents who traverse France, go into hotels, restaurants, and drinking shops, taste the wine served there, take samples of it, have it analysed, and if necessary, report it. If adulteration is proved, the syndicates follow up the matter, inaugurate proceedings, and in many cases act as plaintiff. The Confederation has thus obtained numerous convictions. In 1921 after certain prosecutions had either been dismissed without enquiry by the courts, or inadequate penalties adjudged, the Con-

federation made an application to the Minister of Justice, who sent a circular to the courts requesting them to be more severe. This service of investigation of adulteration is a great expense to the Confederation. In 14 years of its existence, the sums thus expended may be estimated at between seven and eight million francs, and even so the cost was less in the first years, when the service was not completely organized. For some years past, the sum in the Confederation's yearly statement of accounts for the investigation of adulteration exceeds 500,000 francs.

In pursuance of its propaganda for co-operation which is linked with that for the formation of syndicates, the Confederation has taken part in the formation of numerous co-operative societies for the sale of wine, as well as for wine-making and distillation, all originating from its communal sections. To give an example, the Syndicate of Narbonne by itself includes six co-operative societies for the sale of wine, and about twenty for distillation.

Finally the Confederation has thrown out off-shoots. Under its influence and with its advice were formed the Confederation of the South-East, the Confederation of Viticultural Associations of Burgundy, the Algerian Confederation, etc. In pursuance of the complete organization of French viticulture, the Confederation in 1913, brought about the formation of the Federation of Regional Associations of France, of which it has since assumed the direction. Delegates of the Confederation were also received at Barcelona in 1912 and assisted in the constitution of the Union of Catalan Vinegrowers with similar aims.

In the yearly statement of accounts of the Confederation, the receipts vary considerably. They are made up as a matter of fact of the share of the Confederation in the tax of ten centimes per hectolitre produced, which the members pay to their respective syndicates. The division of the sums paid by the members is arranged as follows. Besides the tax per hectolitre just mentioned every member pays to his syndicate a yearly subscription of 25 centimes. The sum produced by these subscriptions remains untouched in the coffers of the syndicates. As to the ten centimes per hectolitre produced paid by the members, two centimes remain on the books of the communal section, and the other eight are paid to the treasurer of the syndicate* to which the section belongs. Finally a sixth part of what is collected by the syndicates goes to the confederation, forming the receipt side of its budget. We may add that the receipts of the Confederation vary from 1,000,000 to 1,500,000 francs.

M. B.

2. A CO-OPERATIVE SOCIETY OF SEED PRODUCERS. — Report by M. R. AUBERGE, President of the Co-operative Society of the Seed Producers of the Melasse district, to the General Assembly of the Agriculturists' Society of France (*Bulletin de la Société des Agriculteurs de France*, Paris, supplement to the issue of May 1922).

For a long time past the cultivators of the Melun region had been much concerned at the somewhat poor quality of the seeds supplied by

the dealers to them whenever they decided on making the necessary sacrifices for improving production. Especially since the war the seeds usually on the market had become mixed and far from pure. They therefore decided to form themselves into a co-operative society for the production of selected seeds.

Following on negotiations which took place at the Agricultural Society of Melun between a certain number of cultivators and the Director of the Agricultural Services, a group of 25 farmers, representing a cultivated surface of 6,000 hectares, associated themselves at the end of the year 1920. In spite of the considerable extent of their farms, the various members were grouped within a radius of not more than fifteen kilometres. This made possible satisfactory oversight and a complete application of the co-operative principle.

The members subscribed 590 shares of 400 francs, representing a total capital of 236,000 francs, one quarter of the total value being paid up.

By the terms of article 3 of the rules, the aim of the society is the improvement of cereal seeds, and, with this object, in particular, to produce high-class seeds on a farm known as the "selection farm"; to multiply these high-class seeds in the co-operators' fields; and to subject the seeds so produced to every kind of sorting operation, and to sell them to the best general advantage.

Besides its administrative council, the society has a manager who keeps the books, and who under the chairman's directions sees to the carrying out of all work, correspondence and generally all the operations of the society.

For use in the selection operations, the society has chosen a farm of 430 hectares, on which an area of 60 hectares can be reserved each year, on the one hand for the work of selection properly so-called, on the other for the multiplication of the seeds intended for delivery to the co-operators so that a commercial production may be ensured. A technical committee decides each year on the programme for the cultivation of the selection farm and gives all the necessary directions for the carrying out of the programme. The greater part of these directions are carried out under the oversight of an agricultural expert, whose business it is to examine the cultures, to take samples, to mark plants or ears of special interest and generally to carry out observations or operations that seem necessary to ensure satisfactory selection.

To begin with, the labours of the society have been confined to the varieties of autumn wheat; in the near future there will also be undertaken the scientific selection of the better kinds of spring wheat and oats.

The committee of inspection is composed of three members, chosen by the administrative council from outside the co-operators, and including a former cultivator, a former miller or seedsman, and an agricultural expert who has no connection with the grain trade or with seed production. It is the duty of this committee to visit the plots where the co-operators are reproducing the high-class seed. It has to ascertain in particular whether the seeds are of pure strain, good, homogeneous and free

from disease. Estimates are established by the method of giving points for the different characteristics inspected (purity of strain, homogeneity, vigour, yield, resistance to lodging, freedom from diseases). Perhaps in the future it will be possible to take into consideration gluten content.

Fields to which less than 80 per cent. of the maximum number of points are given by decision of the majority of the Committee are rejected. As in 1921, out of 744 hectares inspected only 212 were passed, it is obvious that the test is severe, and that the seed passed could be delivered with an assurance of giving satisfaction to the buyers.

In the fields that have gained the best marks from the Committee of Inspection, the plants of exceptional quality are picked out and the best ears on them used for the sowings made in the autumn the purpose of which is the discovery of better strains. Thus scientific selection proceeds indefinitely.

While waiting for this to allow of obtaining all the seeds necessary for multiplication with the co-operators, an extremely rigorous selection will be continued, beginning from seed from the best lots which the society will always have at hand for the members.

The normal selection period, that is to say the one beginning in the autumn of 1921, will go on over four years for each lot.

In the first place choice will be made of heads of certain strains, taken as fixing the characteristics of strains already selected.

The area given up to each variety will be perforce limited to a few acres only.

The second year, the product of the best strain of each variety will be multiplied on as large a scale as possible, then selected on the spot before harvesting, so as to eliminate plants of only fair growth or showing signs of disease.

During the third year, a new multiplication, followed by a selection both on botanic and mechanical lines, should allow of obtaining at the end of the process of the seed for a fourth crop which, after having been its turn strictly selected at the selection farm, will supply the seeds the co-operators require.

Beginning from 1921, all the seeds these latter require for their seed production have been supplied to them by the society, and beginning from the autumn of 1922 they will in future receive only seeds coming from the selection farm.

Each co-operator may only sow one kind of wheat, so far as possible. This is an absolute rule for each plot so as to avoid mixtures.

After the seeds have been passed on the spot by the Committee of Inspection, the wheats are threshed by the farmers and the Committee institute a fresh inspection for the purpose of passing the lots threshed. This operation includes:

1. The checking of the number of bags of each variety;
2. The taking of two half-kilogramme samples of each variety;
3. The delivery of a number of seals corresponding to the number of bags passed ;

4. The affixing of the seals to the bags as they come off the weighing machine, to establish the weight.

The samples taken are sent to the seed trial station in Paris for inspection.

The sorting of the seeds finally passed takes place in a shed working only for the society.

The careful cleaning of all the gear after the treatment of a variety, the uniformity of operations during a season, the percentage of seed and waste in each lot, the scrupulous sealing, the exact fixing of all the bags at 100 kilos and their satisfactory appearance with labels showing origin, all these are under the oversight of a special officer of the society. All bags used for delivery have been and will continue to be invariably new, showing the trade mark of the society clearly, as well as the date of the year of the crop and the name of the variety of wheat. 'M. B.

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3. A CO-OPERATIVE ALPINE PASTURE SOCIETY. — *Bulletin mensuel de la Société Centrale d'Agriculture de l'Office départemental agricole et des Comices et Associations agricoles de la Savoie*. Chambéry, May 1922.

With the object of pasturing their cattle and disposing of the produce on co-operative lines, 40 breeders of Pralognan (Savoy) have just bought a mountain of 600 hectares, with pasture for 120 cows and as many calves. The total cost was 109,000 francs. The agriculturists have subscribed 26,000 francs, and the remainder of the sum will be found by the local agricultural credit bank, on the terms of repayment in 25 years at two per cent.

The annual amortization of the advance from the agricultural credit bank will be effected by the payment of a tax of 40 francs per cow, 20 francs per calf, 15 francs per pig. After the payment of interest at 5 per cent. on the shares paid up, the management expenses will be divided in proportion to the number of cows, and the profits of the sale of the common produce will be divided in proportion to the quantities of milk supplied by each owner.

We may add that, properly managed, the pasture will take more than 150 cows and thus will acquire a superior value.

This undertaking will make it possible for the breeders of Pralognan to realize an annual profit of more than 50,000 francs, while during the War years, with an average pasture rent of 40 francs per cow, they experienced a loss of more than 200,000 francs. M. B.

FRENCH COLONIES.

A CO-OPERATIVE SOCIETY OF EMPLOYERS OF AGRICULTURAL LABOUR IN NEW CALEDONIA. — *Bulletin du Commerce de la Nouvelle-Calédonie et des Nouvelles-Hébrides*. — Noumea, 3 February 1922.

On New Caledonia having recourse to Javanese labour, requests were made more than once for the creation of an organization to act

instead of individual colonists in bringing in the labourers. Calculating the net cost of bringing over a labourer at 1,800 francs (cost of bringing into the country 1000 francs, repatriation 500 francs, money wages 300 francs) for a five years' engagement covering about 1800 days' work, the Chamber of Agriculture has decided on the creation of an Agricultural Labour Association, which will obtain from the Bank or by a public issue of bonds the necessary sum, repayable in five years time at latest, that being the period of the hiring agreement.

The employer will have to pay: 1. at the time of enrolment in the association, a sum of 150 francs, which will become the property of the association as soon as the employer has received his labourer, and will serve to cover the interest of the capital tied up; 2. as a subscription, a sum of one franc a day, payable every three months. This subscription will represent a payment of 1800 francs for each Javanese who reaches the end of his term of engagement, the sum necessary to cover the cost of bringing him over, his repatriation and his wage. The risk of death during the period of the agreement, a heavy charge on the individual colonist, will be borne by the new organization which, acting for the whole body, will meet this risk out of reserves. The association will benefit by the interest on sums not utilized for Javanese who do not wish for repatriation. When these reserves have accumulated, it will be possible to consider the undertaking by the association of risks of sickness and the cost of the education of orphans.

The Agricultural Labour Association is administered by a Committee of three members. The Chamber of Agriculture has voted a sum of 50,000 francs, taken out of its available surplus, for this Association. A second payment of 25,000 francs will be made in the course of the year. Finally the Agricultural Syndicate has decided on its own part to co-operate financially in this undertaking.

M: B.

GERMANY

1. AN EXPERIMENT IN THE CO-OPERATIVE MANAGEMENT OF A LARGE AGRICULTURAL UNDERTAKING. — *Landwirtschaftliches Genossenschaftsblatt*, No. 1. Neuwied, 7 January, 1922.

An experiment in the co-operative management of a noble estate (*Rittergut*) has been made on the estate of Hohendorf (near Reichenbach) in East Prussia. The owner handed over a part of his land to his employees and farm labourers to be managed on a joint basis. After a short probationary period the *Wirtschaftsverband Hohendorf*, a co-operative society with limited liability, was founded in July 1920. According to the rules of this society the following were eligible for membership: 1. the owner of the Hohendorf estate; 2. agricultural labourers under 45 years of age possessing, in addition to 300 marks in ready money, a cow, pigs, poultry and a sufficiency of implements; 3. the employees and workmen required for carrying on the business of the society. All members must be resident in Hohendorf.

Each member receives for himself and his family: 1. a dwelling house with outhouses, a garden and kitchen garden; 2. grain, pulse and whatever else is required for domestic consumption, as a fixed payment in kind; 3. if married, permission to keep a cow, with fodder supplied gratuitously, provided as many as three members of his family take part in the work, or to keep two cows, if more than three members of his family do so; 4. a cash wage, fixed by the management of the society, which represents a monthly advance on the share of the profits due to him.

The shares are of the value of 100 marks and the liability is equal to five times the value of the share. The work of the members, and of the persons charged with the direction of the undertaking, as well as the payment and receipt of money and the keeping of accounts are minutely regulated. Fifty per cent of the net profits go to the building up of a guarantee fund, which forms the capital of the society. The remainder of the surplus is divided among the members in proportion to their annual earnings.

The first working year of the co-operative society closed on 1 July 1921. In spite of a very poor yield of cereals and potatoes, as well as the low price of milk on the one hand, and the high wages and expenses on the other, a net profit of over 100,000 marks was made. Of this 50 per cent. was allocated to the formation of a reserve fund, taxes absorbed 10 per cent., 11,600 marks was assigned to a mutual aid fund for the members, and the remainder, 37,101.36 marks, was divided among the members, corresponding to a bonus of about 30 per cent on the year's earnings. These bonuses amounted to from 400 to 2,700 marks for individual members. The result of the first year's working under such unfavourable conditions, shows that the co-operative working of large agricultural undertakings offers good prospects to the co-operators.

M. T.

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2. THE ECONOMIC COUNCIL OF THE CO-OPERATIVE PRODUCTIVE SOCIETIES AND DISTRIBUTIVE SOCIETIES. — *Freie wissenschaftliche sozialistische Agrar-Korrespondenz*, No. 586. Berlin, 1 February 1922.

At a conference held at Hamburg which was attended by representatives of the General Federation of the German Raiffeisen Co-operative Societies, of the National Federation of German Co-operative Agricultural Societies, of the Central Federation and Wholesale Purchase Society of the German Co-operative Distributive Societies, and of the National Federation and Central Wholesale Purchase Society of the German Co-operative Distributive Societies, and in which the Ministry of Provisioning and Agriculture also took part, the mutual relations between the Central Federations of the producers and consumers were fully discussed. To promote and maintain direct business relations among the above mentioned organizations, and 'to establish general' guiding principles in this matter, a permanent committee was instituted, the Economic Council of the German Co-operative Productive and Distributive Societies (*Wirtschaftsausschuss der deutschen Erzeuger-und Verbrauchergenossenschaften*).

The presidency, which will pass in turn to each of the four federations, was entrusted for the year 1922 to the General Federation of the German Raiffeisen Co-operative Societies.

M. T.

GREECE.

AGRICULTURAL CO-OPERATION IN GREECE. — MYLONAS (Alexandre C.): Le mouvement coopératif en Grèce, in the *Bulletin de la Chambre de Commerce française en Grèce*, Athens, Year 1921, No. 33.

The co-operative movement in Greece is of quite recent origin. Under M. Venizelos' Government the newly constituted Ministry of National Economy undertook from 1912 onwards, by means of a department created for the purpose, a systematic propaganda on behalf of co-operation. In 1914 a comprehensive law was passed dealing with co-operative societies. Under the provisions of this law, it has been possible to form on a legal basis co-operative associations alike agricultural and urban and industrial.

The legislature has allowed perfect freedom to the development of all co-operative systems: the future will prove which is the best. The law places no restrictions on the aim of the co-operation, on the area of operations of the society, on the liability, which may be limited to the shares or to a multiple of them, or may be unlimited, etc.

Until the unions and federations take up the work at least in part, supervision, inspection and propaganda in relation to co-operation and mutual aid will fall at present on the departments of the two new Ministries that have sprung from the division of the Ministry of National Economy, that is to say, on the one hand the Ministry of Agriculture for the agricultural societies; on the other the Ministry of Commerce, Industry and Labour, which continues to be called the Ministry of National Economy, for the non-agricultural societies. These departments issue model rules and point out the necessary modifications.

Among the penal clauses, there may be mentioned a article constituting a radical interference on the part of the State in favour of co-operation as against all opposition: punishment by fine or imprisonment for a period which may extend to six months is inflicted on "masters, traders, manufacturers, capitalists or any other persons who for personal reasons hinder or dissuade any one from becoming a member of a co-operative society or try to force or induce a member to leave a society, or who practice unlawful means calculated to bring about the dissolution or disorganization of the co-operative society or to prejudice it in any way." Punishment is also inflicted on those who use their influence in the society to obtain an unfair remuneration, as well as members of the Committees of Management or of Supervision guilty of corruption.

On the other hand it has been decided that the personal creditors of members of co-operative societies cannot seize either agricultural produce, consigned to the society to be sold, nor the price of such produce with which the society will credit its members.

Finally, the law grants various privileges to co-operative societies,

such as fiscal exemptions, postal facilities, supply of co-operative products to the State or to the communes without contracts, pecuniary rewards to institutions and persons forming co-operative associations, or arranging courses on co-operation to be held during the summer holidays for schoolmasters.

Excellent results have accrued from this law. Before 1914, apart from certain old co-operative undertakings in certain communes, or primitive associations of pastoral peoples for the pasturage of their herds, and for joint production and sale of products, there were not in existence more than about ten co-operative societies properly so-called. The internal troubles of recent years and the War have not prevented the application of the new law and the development of co-operation in Greece. On the contrary the abnormal conditions of the War have brought home to the people here as elsewhere the pressing need for co-operation. That is why at the end of 1918 the co-operative societies of all kinds, formed as a result of the law of 1914, numbered 917 with 45,070 members and 2,945,817 drachmas of capital. In this number there are not included the co-operative societies for the purchase, farming, working and redistribution of lands, societies arising in consequence of the agrarian law dealing with forced expropriation and the redivision of large estates among small cultivators: the number of these societies is at present about 200. Nor are there included the co-operative land-holding societies to be found on certain crown lands or sequestrated estates.

Out of these 917 societies, 280 were agricultural, including 32,648 members with a share capital of 2,515,540 drachmas. Only about 100 are societies with unlimited liability; the liability in the others varies from twice to five times the share, but some go to ten times or even fifty times the share. The total sum represented by the limited liability comes to 15,972,845 drachmas. The area of the society's operations is generally not larger than that of the commune in which the office is situated. About three quarters of the agricultural co-operative societies are of a mixed type, covering credit, savings, purchase and sale. These mixed societies are of great service in small localities. The need for the foundation of specialized societies is only apparent in the large villages, where operations become more complicated, and a greater number of competent managers are to be found. It is the duty of a mixed association, according to its rules, to take part in the formation of specialized societies as soon as circumstances permit.

Among the other agricultural societies we must mention the co-operative societies for purchase, sale and production; co-operative wine-making societies, co-operative dairies and oil-mills. We may call attention also to the societies for the sale of raisins, which are on the way to forming a Central Union.

The number of co-operative societies has more than doubled from 1918 to the end of 1921. At that date there were 1,711 agricultural societies with 95,963 members. Estimating that each person represents a family of five persons on the average, it may be calculated that nearly

half a million persons are interested in agricultural co-operation. Out of these societies 467 have unlimited liability and 1,264 have limited liability. The total of the share capital is 7,325,536 drachmas, and the total liability in the societies with limited liability 46,810,777 drachmas. We may add that there are at present 209 non-agricultural co-operative societies.

A certain number of co-operative societies have banded themselves together and have formed some ten district unions. Steps are being taken to form a National Federation.

The National Bank supplies credit to co-operative societies. The loans made to agricultural co-operative societies (in the statement of accounts for 1921 nearly 25,000,000 drachmas at the rate of 5 per cent.) are regularly repaid, and their total shows a rapid increase from year to year. On the other hand, in Macedonia, in Epirus, in Crete and the Archipelago, three Agricultural State Banks, while especially engaged in making mortgage loans, also take their share in co-operative credit.

M. B.

RUSSIA.

THE NUMBERS OF AGRICULTURAL CO-OPERATIVE SOCIETIES ON 1 JANUARY 1922. — *Russian Information and Review*, Vol. I, No. 12. London, 16 March 1922.

Returns compiled by the Commissariat for Agriculture show that on 1 January 1922, there were over 10,000 agricultural co-operative societies in existence, embracing 2,000,000 peasant households. The types of organization are shown in the following list, which is not complete, and represents only those for which particulars are available:—

Types of Agricultural Co-operative Societies.

1. Producers' societies:	
Artels and fellowships in common	533
2. Specialised Societies:	
Agricultural machinery societies	27
Stock breeding societies	3
General improvement societies	118
Societies for buying materials, etc.	29
3. Agricultural produce societies:	
Dairy produce	1,068
Orchard and kitchen garden	117
Bee-keeping artels	82
Seed oil	36
Grain milling	482
Flax	21
Societies for sale of all kinds of agricultural produce	2,116
4. Credit societies	84
Total . . .	<u>4,716</u>

Many of the consumers' co-operative societies also carry out, on behalf of their members, operations similar to those of the special agricultural societies, so that the total volume of assistance rendered by co-operation to the peasantry is very considerable. M. T.

KINGDOM OF THE SERBS, CROATS AND SLOVENES.

THE DEVELOPMENT OF CO-OPERATION. — *Agramer Tageblatt*. Agram, 9 March 1922.

In different parts of the country the following co-operative societies are affiliated to the General Federation of the Co-operative Societies of the Kingdom of the Serbs, Croats and Slovenes:

In Serbia the Federation of the Peasant Co-operative Societies, with 1500 co-operative societies, 85,377 members and a total business (in-comings and out-goings) of 85,481,081 dinars.

In Croatia and Slovenia, the Croat-Slovene Agricultural Union of Agram with 321 societies, 70,622 members and a total business of 813,579,517 crowns; the Federation of Serbian Peasant Co-operative Societies of Agram, with 411 societies, 10,624 members and a total business of 186,817,984 crowns; the Central Federation of Croatian Peasant Co-operative Societies with 375 societies, 40,634 members, and a total business of 283,823,019 crowns; the Croat-Slovene Agricultural Union of Osijek with 183 societies, 31,141 members and a total business of 85,481,081 dinars.

In Slovenia, the Federation of the Co-operative Societies of Laibach with 525 members, and a total business of 1,462,700,789 crowns; the Federation of the Slovene Co-operative Societies of Laibach with 127 societies, 17,332 members and a total business of 126,320,774 crowns; the Co-operative Federation of Celje, with 142 societies, 31,572 members and a total business of 231,678,174 crowns.

In Bosnia and Herzegovina, the Federation of the Serbian Peasant Co-operative Societies of Sarajevo, with 116 societies and 7,089 members; the Federation of Croatian Peasant Co-operative Societies of Sarajevo, with 77 co-operative societies.

In Dalmatia, the Co-operative Federation of Split, with 262 societies, 54,000 members and a total business of 576,000,309 crowns; the Federation of Co-operative Purchasing Societies of Primorje Dubrovnic with 62 societies, 2,834 members and a total business of 345,870 crowns.

On the whole, taking count of the other societies that are outside the General Federation, there are in the whole country in round figures 5,000 co-operative societies, with about 500,000 members. M. T.

Credit

GREAT BRITAIN AND IRELAND.

AGRICULTURAL CREDIT FACILITIES DURING THE WAR.

OFFICIAL SOURCES :

- REPORTS OF THE BOARD OF AGRICULTURE FOR SCOTLAND for the years ended 31st December 1914 to 1920. Edinburgh, 1915 to 1921.
- ANNUAL GENERAL REPORTS OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND, 1913-14 to 1918-19. Dublin, 1915 to 1921.
- REPORTS OF THE CONGESTED DISTRICTS BOARD FOR IRELAND, for the years ended 31st March 1914 to 1920. Dublin, 1915 to 1921.
- MINISTRY OF RECONSTRUCTION: REPORT OF THE AGRICULTURAL POLICY SUB-COMMITTEE OF THE RECONSTRUCTION COMMITTEE. London, 1918.
- CONACHER (H. M.) and SCOTT (Dr. W. R.): Economics of Small Farms and Small Holdings in Scotland. Interim Report to the Board of Agriculture for Scotland. Edinburgh, 1920.
- CONACHER (H. M.) and SCOTT (Dr. W. R.): Agricultural Credit and Organisation in France, with suggestions for a Scottish Scheme of Agricultural Credit. Report to the Board of Agriculture for Scotland. Edinburgh, 1921.
- Journal of the Board (now Ministry) of Agriculture*, Vol. XXIV, Nos. 1, 6, 9, 10; Vol. XXV, No. 6, and Vol. XXVIII, No. 10. London, April, September, December 1917; January, September 1918, and January 1922.
- Journal of the Department of Agriculture and Technical Instruction for Ireland*, Vol. XVII, Nos. 2, 3, 4. Dublin, January, April, July 1917.
- Information directly supplied to the International Institute of Agriculture by the Department of Agriculture and Technical Instruction for Ireland.

OTHER SOURCES :

- REPORTS OF THE AGRICULTURAL ORGANIZATION SOCIETY for the years ending 31st March 1916, 1917 and 1918. London, 1917, 1918 and 1919.

The need of additional credit facilities was not very strongly felt by the farmers of Great Britain and Ireland during the early part of the War, and, for reasons of public economy, some of the facilities which they had previously enjoyed were restricted. It was not until efforts were being made in 1917 largely to increase the area of arable land that some steps were taken to give greater opportunities to farmers to obtain the capital required for putting the scheme into execution. We propose here to indicate for each of the three kingdoms separately the initial restrictions (if any) and the subsequent increase of agricultural credit facilities.

§ I. AGRICULTURAL CREDIT IN ENGLAND AND WALES.

In March 1917, the Board of Agriculture made arrangements with the principal banks in England and Wales whereby the Banks agreed to grant loans to farmers, against the guarantee of the Government, for the purchase of seeds and artificial manures. The main object of the scheme was to promote the increased production of wheat, oats and potatoes, but similar advances would be made in respect of other crops, the growth of which might in special cases be a matter of urgent national importance.

A farmer desiring to avail himself of the facilities was to apply to the War Agricultural Executive Committee for his county stating the description and quantity of fertilizers or seeds which he wished to procure and the source from which he suggested that they should be obtained; the class and acreage of the crop in respect of which the expenditure was to be incurred; the reason for seeking assistance in obtaining special credit, and the name of the bank at which he had an account, or, if he had no banking account, the bank at which he would wish the credit to be provided.

The Executive Committee, after such inquiry as they might deem necessary, could approve the provision of credit and authorize the applicant to order from any firm or society approved by the Committee, goods of the description and value specified in the authority. The Food Production Department suggested to the Executive Committees that use should be made of well-established co-operative trading societies, and that the Committees should draw up lists of such societies as well as of private traders with whom they would approve of transactions taking place.

The applicant was to place his order with the approved firm or society, together with the letter of authority, and to request them to send to the Executive Committee the invoice announcing the despatch of the goods. The Committee was then to endorse the invoice to the bank nominated and to forward it to the applicant. The latter would present the endorsed invoice to the bank, who would pay it, and take from the applicant a promissory note agreeing to repay the amount with interest at 5 per cent. on a specified date. The period of the loan was not to exceed nine months. This scheme was extended in the autumn of 1917 by including in the purposes for which the loans could be granted the purchase of working horses, machinery, implements or any other requirements necessary for the increase of food production. While loans were usually to be granted for nine months, they might be renewed at the expiration of the nine months for a further period. Co-operative societies were made eligible for the grant of credit under the scheme as well as individual applicants.

Some modifications, rendered necessary by the extended scope of the scheme, were made towards the end of the year. A different procedure was authorized for dealing with applications by farmers who had a banking account. Upon approval of an application the Executive Committee

would notify the applicant and his banker and the Bank would on the request of the applicant credit him with the approved amount, or any smaller amount he might specify. The applicant would then order his requirements in the usual way and settle the account (or accounts) direct with the dealer (or dealers) by drawing on the Bank up to the amount authorized. The receipted invoice (or invoices) would then be sent by the applicant to the Committee for scrutiny and subsequent return to him. A comparison of the invoice (or invoices) with the particulars of the approval afforded a safeguard against the use of credit for other than approved purposes. In the case of applicants who had no banking account the procedure previously followed was to be continued.

It was left to the discretion of the Committees as to whether they would make it a condition of the grant of credit that the purchases made under the scheme should be insured or that the applicant should repay the advance forthwith in the event of a sale being effected before the obligation to repay had matured.

The Government guarantee in respect of the loans was originally limited to the period ended 31st December 1917, but it was extended for a further period of twelve months from that date.

A further extension of the scope of the scheme was made in August 1918. Its application was authorized in cases in which farmers for whom cultivations were carried out by the Agricultural Executive Committee had not sufficient ready money to pay cash to the Committee for those cultivations. This authorization was of distinct advantage in enabling an occupier who was short of working capital to break up additional land, and in obviating the necessity for the Committee to enter and take possession, with a view to carrying out the cultivations and recovering the cost when the crops were harvested.

The scheme was discontinued after the War, but a Special Committee was appointed towards the end of 1921 by the Agricultural Advisory Committee for England and Wales "to consider and report whether in the interests of maintaining production, and to promote employment on the land, it is desirable to revive or to extend the scheme of providing short term credit to farmers which was in operation during the War."

During the War an investigation into the conditions of agricultural credit was made for the Agricultural Organization Society by Mr. John Ross. Upon the basis of his report a scheme was drawn up, which was approved by a Conference of societies affiliated to the Agricultural Organization Society and was afterwards adopted without alteration by the Agricultural Policy Sub-Committee of the Reconstruction Committee in their Second Report.

The scheme was confined to the subject of credit for the purchase of goods by the farmer. It was proposed that the Joint Stock Banks should be asked to finance the scheme as an ordinary banking proposition, and the main proposals were:—

1. That the credit should be closely linked with trading.
2. That a condition of the credit should be that the farmer should

buy from the Trading Society of which he is a member everything for the purchase of which he wants credit.

3. That this credit should accordingly be administered solely by approved agricultural co-operative trading societies and by their central wholesale purchasing body, the Agricultural Wholesale Society, and should be available only to members of such approved societies.

§ 2. AGRICULTURAL CREDIT IN SCOTLAND.

Under the Small Landholders (Scotland) Act, 1911, the Board of Agriculture has power to grant loans to existing landholders for the re-erection or improvement of buildings on small holdings. In 1914 loans for these purposes to a total amount of £8,223 were granted, but in the following year the Board decided to grant such loans only in cases where the loans previously granted were insufficient owing to the rise in prices to complete buildings in course of construction.

The Board had also powers to grant loans for similar purposes to new holders. These were continued during the War, but the applications were not numerous, partly on account of the scarcity of labour and the increased cost of materials.

Loans and (more often) grants are also given by the Board for obtaining fencing material. They are given only to townships with statutory Grazings Committees and during the War the making of such grants or loans was practically suspended.

In 1915 the Board of Agriculture agreed to make advances, not exceeding £600 in all, to District Agricultural Committees to enable them to purchase manure distributors for the purpose of hiring them to farmers, and offered an advance to a District Committee which desired for the same purpose to purchase two motor ploughs. These advances were to be repayable by annuity over five years, calculated at 3 per cent. interest.

In 1916 the Board adopted the policy of itself purchasing agricultural machinery and implements and allocating them to District Agricultural Executive Committees for hire to farmers. At the outset the implements were sold to the Committees, the price being payable by annual instalments, but in September 1917, in order to relieve the Committees of financial responsibility and with a view to simplifying arrangements for the supply of petrol, oils, spare parts and skilled drivers the Board took over all the machinery and implements then in the hands of the Committees.

After the War the Board of Agriculture instructed Mr. H. M. Conacher and Dr. W. R. Scott to make an enquiry into the economics of small agricultural holdings in Scotland, as a preliminary to a consideration of the need of making capital more readily available to the occupants of such holdings. They presented a report on this subject in 1920 and in 1921 a further report embodying the results of a study of agricultural credit in France and containing a scheme of agricultural credit applicable to Scottish conditions. They suggested that provision should be made:—

1. For the issue of short-term loans (from three months to five years):

(a) To co-operative trading societies engaged in the purchase of seeds and agricultural requisites and the sale of eggs and poultry, provision of raw material and implements and sale of products of industries, provision of agricultural machinery for farmers and crofters.

(b) To individual farmers and crofters, mainly for the purchase of stock.

2. For the issue of long term loans to societies of co-operative production to help them to obtain fixed capital.

3. For the issue of long term loans to individuals desirous of accumulating capital to enter a holding, such individuals having in the meantime deposited sums in anticipation with the credit institution.

4. For the issue of long term loans to stock insurance societies. They did not recommend the creation of a central land bank to deal with this varied business, nor did they propose to adopt the French plan of local co-operative societies dealing almost exclusively in short-term credit. They proposed, however, that a number of district credit institutions should be formed resembling the French "Caisses régionales." Ultimately they hoped that it might be possible to set up such an institution in every county where crofters and small farmers were numerous. In the meantime it might be possible to form them in districts where there was a number of co-operative trading societies. It was hoped that all such societies would take shares in the county or regional land bank.

§ 3. AGRICULTURAL CREDIT IN IRELAND.

In Ireland loans for agricultural purposes are granted by several Government Departments — the Board of Works, the Department of Agriculture and the Congested Districts Board.

Loans Granted by the Board of Works. — The Board of Works grants two distinct classes of loans, namely loans for arterial drainage and loans for land improvement. Though at one time considerable sums were advanced for arterial drainage the amount so advanced had been exceedingly small for some years prior to the War. In 1913-14 a loan of £50 was made for river drainage and in 1918-19 a sum of £400 was advanced for river drainage maintenance, but these are the only loans of this class made in recent years. Loans for land improvement are made to landowners under the Landed Property Improvement Act 1847, and subsequent amending acts, and to tenants under the Land Law Act of 1881. Loans of these two classes were suspended from August 1915 to February 1919; that is to say, no new loans were sanctioned, though sums were advanced in respect of loans previously sanctioned. Table I shows the number of loans for land improvement sanctioned and the sums advanced in each financial year since 1913-14.

TABLE I. — *Loans for Land Improvement granted by the Board of Works.*

Year	Loans to landowners		Loans to tenants	
	Number of loans sanctioned	Amounts advanced	Number of loans sanctioned	Amounts advanced
		£		£
1913-14	976	83,357	709	43,519
1914-15	820	88,914	477	37,614
1915-16	5	18,949	2	5,301
1916-17	—	2,855	—	493
1917-18	—	155	—	—
1918-19	—	—	—	—
1919-20	65	6,524	14	900
1921-22	71	16,926	17	2,611

In connection with the schemes for increasing food production loans were given in 1917 to occupiers of holdings not exceeding £10 valuation and to tenants of labourers' plots or allotments for the purchase of seed oats, seed potatoes and artificial manure. These loans were given in kind through the medium of the Rural and Urban District Councils, which were authorized to raise funds on the security of the rates with which to purchase in bulk seeds and manure for distribution to such occupiers, who were to pay for them on specially easy terms. The funds were advanced by the Board of Works and the Department of Agriculture arranged to procure supplies of seeds and manure for the local authorities. A supplementary scheme was also drawn up for supplying seed oats and seed potatoes to non-rated small cultivators in rural districts.

The scheme for small holders and labourers was adopted by 128 Rural District Councils and 39,644 applications were received. The supplementary scheme was adopted by 21 Rural District Councils and 1,019 applications were received. The scheme for allotment-holders was adopted by 28 Urban District Councils, but no applications were received.

The total quantities of seeds and manure supplied under these schemes were: Potatoes, 5,809 tons; oats, 1,892 tons; manure, 2,900 tons; vegetable seeds, 478 parcels. In addition loans were sanctioned in a few cases by Rural District Councils for the direct purchase of seeds. The cost, exclusive of carriage, of the seeds and manures supplies was approximately £117,000 and the total amount advanced by the Board of Works to Rural District Councils was £123,140.

For the 1918 season it was not found necessary to continue the scheme for the supply of seeds on credit, as it appeared that a sufficient supply would be available in most districts.

Loans Granted by the Congested Districts Board. — The Congested Districts Board grants loans to tenant-purchasers in the congested districts for the erection or improvement of dwelling-houses and loans for the purchase of live stock to migrants and tenants who have obtained substantial increases to their holdings.

The granting of loans for the erection and improvement of dwelling-houses was practically suspended during the War for reasons of economy, such loans being only given in a few exceptional cases, and was not resumed after the cessation of hostilities. Table II shows the number and amount of such loans sanctioned in each financial year since 1913-14.

TABLE II. — *Loans for the Erection or Improvement of Dwelling-houses Granted by the Congested Districts Board.*

Year	Loans for the erection of dwelling-houses		Loans for the improvement of dwelling-houses	
	Number	Amount	Number	Amount
		£		£
1913-14	41	1,940	42	1,115
1914-15	66	3,160	30	1,022
1915-16	3	120	3	150
1916-17	1	25	4	100
1917-18	3	105	—	—
1918-19	—	—	3	65
1919-20	—	—	2	50

No special restrictions was placed on the issue of loans for the purchase of live stock but the number of loans issued since 1913-14 has steadily declined, except for a slight rise in the year 1917-18. Table III shows the number and amount of loans issued under this scheme since 1913-14.

TABLE III. — *Loans for the Purchase of Live Stock issued by the Congested Districts Board.*

Year	Number issued	Amount
—		£
1913-14	164	3,636
1914-15	123	3,065
1915-16	82	2,510
1916-17	81	2,648
1917-18	96	2,803
1918-19	45	1,457
1919-20	33	1,204

Loans Granted by the Department of Agriculture. — The Department of Agriculture for Ireland had in operation prior to the War a number of

different schemes for the granting of loans for agricultural purposes. So freely was advantage taken of these schemes that in 1913-14 the funds set aside for the purpose became exhausted and even before the outbreak of War it was determined to restrict both the number of schemes and the extent to which applications for loans could be accepted.

The schemes for granting loans for the purchase of bulls and stallions, which are not aimed at benefiting the individual farmers so much as at introducing pure-bred animals for the benefit of the surrounding locality, were continued during the War, as they were considered indispensable for maintaining in the country a sufficient number of high-class sires. Tables IV and V show the number and amount of loans for the purchase of bulls and stallions since 1913.

TABLE IV. — *Loans Granted by the Department of Agriculture for Ireland for the Purchase of Bulls.*

Year —	Number —	Amount £
1914	211	5,355
1915	132	3,597
1916	134	3,967
1917	116	4,503
1918	92	3,942
1919	90	3,841

TABLE V. — *Loans Granted by the Department of Agriculture for Ireland for the Purchase of Stallions.*

Year —	Number —	Amount £
1914	24	1,757
1915	20	1,050
1916	21	1,417
1917	5	455
1918	11	675
1919	8	787

In the early part of the War the granting of loans for the purchase of agricultural implements and machinery was greatly restricted, but the issue of the Compulsory Tillage Regulations in December 1916 and January 1917, under which farmers were compelled to cultivate an increased area of land, made it necessary to give facilities for the acquisition of the implements and machinery required. The Department of Agriculture accordingly provided loans for this purpose. In the original scheme the loans were not to be of less than £5, though a joint application for a loan of at least £5 from several farmers who individually required a loan of less than that sum would be entertained. Applications from societies of farmers would also be considered. The applicant was expected to deposit

one fifth of the purchase money and the Department advanced him on approved personal security the remaining four fifths. The loan was to be repaid in three annual instalments with interest at the rate of 5 per cent. In the case of the more expensive machinery, such as threshing machines or motor tractors, the period of repayment might be extended to five years.

Early in the summer of 1917 it was decided to reduce the minimum loan from £5 to £2 8s., or, in other words, to reduce the minimum cost of machinery for which a loan would be granted from £6 5s. to £3. This enabled the poorer farmers to obtain, for example, knapsack sprayers.

The number and amount of loans for the purchase of implements and machinery from 1913-14 to 1920-21 are shown in Table VI. The increase resulting from the special facilities given in 1917 is very marked.

TABLE VI. — *Loans Granted by the Department of Agriculture for Ireland for the Purchase of Agricultural Implements and Machinery.*

Year	Number	Amount £
1913-14	482	4,840
1914-15	105	1,106
1915-16	258	4,973
1916-17	3,354	84,449
1917-18	3,014	87,412
1918-19	2,099	63,890
1919-20	908	23,370
1920-21	185	2,530

The Loan Fund System. — There exists in Ireland a form of rural credit known as the Loan Fund System, the origin of which dates back to the eighteenth century. Under this system societies, called "loan fund societies," were formed for making small loans repayable by weekly instalments. The loans were originally intended for industrial purposes, but the majority of the borrowers have long been agriculturists. The system was regulated by successive Acts of Parliament, and was supervised by a central board of commissioners, the Loan Fund Board, but it was defective in many ways and considerable abuses arose in connection with it. The number of loan fund societies was highest in 1842, when it reached 300, but the number and total amount of the loans granted reached their maximum in 1845; in that year, although the number of societies had fallen to 245, the loans granted numbered 507,339 and amounted to £1,857,457. The great famine of 1847 brought about a heavy fall in the number of societies and the number continued from that time to decline steadily. In 1912, there were only 51 societies in existence.

The Departmental Committee on Agricultural Credit in Ireland, reporting in 1914, urged that the powers of the Loan Fund Board should be transferred to the Department of Agriculture. This recommendation was carried out in December 1915 and the Department immediately

gave its attention to the improvement of the system, but this was delayed by the pressure of work in other directions arising from the War.

Early in the spring of 1917 the Department of Agriculture urged the committees of the loan fund societies to utilize the funds at their disposal, as far as possible, during the sowing season for the making of advances to deserving borrowers of the agricultural classes, especially labourers, allotment holders and small farmers, for the purchase of seeds, manures, implements, etc. In the following years, however, owing to the high prices obtainable for agricultural produce, farmers and agricultural labourers did not find it necessary to take advantage of the borrowing facilities afforded by the loan fund societies, with the result that the lending operations of many of them showed a decline.

The following table shows the number and amount of the loans issued by loan fund societies in each year since 1913:

TABLE VII. — *Loans issued by Loan Fund Societies since 1913.*

Year	Number	Amount
1913	31,229	184,628
1914	30,037	179,538
1915	27,768	168,987
1916	25,681	157,736
1917	24,051	154,611
1918	21,023	139,941

The maximum loan which can be granted by a loan fund society was £10, but the average amount of the loans was £5 18s. 2d. in 1913 and increased to £6 13s. 1d. in 1918.

J. K. M.

MISCELLANEOUS INFORMATION RELATING TO CREDIT

COLOMBIA.

1. REGULATIONS RELATING TO THE GENERAL DEPOSIT WAREHOUSES. — *Diario Oficial*, Nos. 1764 and 1765. Bogotá, 4 November 1921.

By the Law of 2 November 1921 regulations were laid down with the aim of defining the legal status of the General Deposit Warehouses in Colombia, and more particularly of defining the function and credit validity of the documents which these same warehouses are empowered to issue in respect of the goods deposited in them.

In the first place the law affirms that by General Deposit Warehouses are meant establishments primarily intended for the deposit, pre-

servation, safe keeping and in some cases the sale of goods, produce or fruits of home or foreign growing, but also issuing credit instruments transferable by endorsement and intended to credit the endorsee with the goods deposited or to obtain loans on the security of the same goods.

These General Deposit Warehouses, as definitely stated in the law, are to be regarded as credit institutions or societies, and are therefore subject to government inspection in conformity with the regulations contained in the legislation in force.

The same law in view of the legal status mentioned as accorded to the General Warehouses, lays down that their rules and regulations must be approved by the Government and further decrees that no General Deposit Warehouse can be established with a capital less than 100,000 pesos of which at least a third must be paid up.

Having laid down the character and lines of procedure of the General Deposit Warehouses, the law cited goes on to regulate the credit instruments which the Warehouses have power to issue. These are: certificates of deposit and warrants or pledge notes (*bonos de prenda*).

The certificate of deposit represents the goods deposited and is intended to act as a means of transfer, the purchase of the certificate conveying also property in the goods.

The warrant represents the loan agreement with the accompanying security of the goods deposited, and confers by itself the rights and privileges of a credit on pledge.

Having indicated the forms of these documents and the information that must be supplied on them, the law lays down some more precise instructions for the employment of these credit instruments, which we will briefly indicate.

It is laid down in the first place that certificates and warrants cannot be issued if the goods corresponding are liable to any charge or to legal seizure, of which the General Warehouse has had notice.

Certificates of deposit and warrants can be passed on by endorsement either together or separately.

The endorsement of a warrant only constitutes for the person in whose favour it is endorsed the pledge of the goods, while the endorsement of the certificate alone confers the right of disposing of the goods on condition of paying the credit guaranteed by the warrant.

The law then gives power to the holder of the certificate of deposit alone to pay the debt guaranteed by the warrant even before it falls due. For this purpose, if an agreement cannot be come to with the holder of the warrant, he will deposit in the General Warehouse, till the day the debt falls due, the capital and interest guaranteed by the said warrant. The holder of the warrant alone, if the amount it stands for is not paid on the due date, can proceed to the protest of the instrument, demanding from the Warehouse the sale of the goods, in accordance with the regulations of the law itself on the point.

In the time intervening between the protest and the beginning of the sale, the holder of the certificate of deposit can redeem the warrant

under protest, by means of the payment of capital and interest. He is besides expected to indemnify all losses, which are calculated at the rate of five per cent. of the capital represented by the warrant protested.

On the other hand in the case when the sale has been effected, the law lays down that the sum made must first of all be used to cover expenses of warehousing, of the sale, and of the care of the goods, etc.; the first claim on the remainder is the payment of the sum guaranteed by the warrant and the interest agreed upon.

If the sum made by the sale should be larger than the amount of the credit represented by the warrant, the excess will be kept at the Warehouse at the disposal of the holder of the certificate of deposit.

In this case also the holder of the warrant protested has the right to compensation for damages, to the extent of 5 per cent. of the capital representing his credit.

If, again, the goods sold are not sufficient to satisfy the credit, he will have a personal claim against the preceding endorsees, who will be jointly and severally liable for the unsatisfied portion of the credit. This claim is subsidiary, unless it is expressly stipulated that it can be exercised as the principal means of recovery.

The holder of the warrant can also make good his claim in the case that the goods are claimed by a third party as his own, having been stolen from him.

The law also contemplates the case in which the goods deposited are insured against fire and lays down that the holders of the certificate of deposit and of the warrant have the same rights over the compensation paid for damage by fire that they have over the goods insured.

The law further confers on the holder of the warrant the right to receive partial payments on account, to be attributed either to the repayment of the capital lent, or both to repayment and to the payment of interest. The holder of the certificate of deposit who is at the same time the holder of the warrant, has the right to demand that the goods deposited should be divided, at his own expense, into several parts or lots and that for each of these a separate certificate should be issued, with a corresponding warrant, in place of the single certificate, which will be withdrawn by the Warehouse.

Even the holder of the warrant has the right to demand the division of the goods deposited into lots. In this case the Warehouse will notify the holder of the certificate of deposit, in order that he may obtain the partial certificates, returning the single certificate, which will be duly cancelled.

In these cases the sale must be carried out in accordance with the division made both in the warrant and the certificate of deposit.

The law lays down, lastly, what must be the characteristic form of the warrants and certificates and gives power to the government to issue regulations for carrying out the law itself.

E. F.



2. THE SYSTEM OF AGRICULTURAL PLEDGES. — *Diario oficial*, No. 17,976-17,977
Bogotá, 11 November 1921.

By Law No. 24, dated 5 November 1921, the system of agricultural pledges was introduced into Colombia and special regulations were laid down for its application.

Under the terms of this law, machinery of all kinds, implements of labour, animals of all kinds and their produce, fruit of every kind, even when ungathered, timber, mineral products and other products of Colombian industry may be pledged.

For the establishment of a pledge on moveables which may be considered as fixtures in view of the purpose to which they are put, if there is a mortgage on the property in which the said moveables are incorporated, the law requires that the consent of mortgagee shall be obtained.

The law lays down that the debtor must keep, in the name of the creditor, the goods pledged, assuming all the duties and responsibilities relating thereto, and that he cannot make any other contract affecting the same goods without the consent of the creditor or creditors.

The debtor is, moreover, forbidden to remove the goods from the place where they were when they were pledged and from the area over which the Registry in which the contract was entered has jurisdiction, unless he notifies the creditor and the person or persons in whose favour the pledge note has been successively endorsed, indicating the place to which the goods are to be removed. When the debtor fails to notify the removal of the goods, the creditor can apply to the local magistrate for the sequestration of the goods or their return to the place where they originally were.

The law allows the debtor to sell the goods pledged, if he wishes to do so, but the goods must not be transferred to the purchaser until the sum due to the creditor has been repaid.

When the property is sold, of which the crops or produce are pledged, the pledge being duly registered, the crops or produce may be handed over to the purchaser, provided he repays the loan for which they served as security.

The contract by which the goods are pledged can be made either in the form of a private agreement or by a public act to be registered in the proper Registry. As soon as it is registered a copy of the entry will be sent to the creditor and this serves as the pledge certificate.

The law lays down special provisions regarding the efficacy of the pledge certificate. It is transferable by endorsement, and if so transferred must indicate the date, the names and addresses of the person who endorses it and of the person in whose favour it is endorsed, as well as contain their signatures. The debtor and the persons endorsing the certificate are jointly and severally liable for the amount of the loan, together with interest and the expenses of recovering them.

The right of distress which arises out of the pledge ceases after 120

years from the registration of the contracts; the law, however, lays down that this period may be interrupted by the presentation on the part of the creditor of the application to levy distress.

At any moment the debtor may himself free from the pledge the goods indicated in the contract, by lodging in court, for the benefit of the rightful holder of the certificate, the total amount of the loan and of other payments due. If this lodgement takes place before the end of the period fixed, the amount lodged must include the interest due up to the end of the period, which will be paid over to the creditor.

The agricultural pledge certificate has the character of an executive document both when personal action is brought against the debtor and the endorsers, and when action is brought against the holder of the goods given in pledge. Even in the latter case the credit given on the pledge of goods has a first claim on the purchase-price of the goods pledged if they are sold, on the amount of compensation if they are insured and, in case of loss or depreciation of the goods through the fault of third parties, on the sum payable by such persons as compensation for damage.

The holder of the pledge certificate cannot act against the endorsers, if he has not taken action to distrain upon the goods pledged within the 30 days following the expiry of the period for which the loan was granted. If he has taken such action, he may take action against the debtors or the endorsers, within the same time or subsequently, for the recovery of the balance due, on the conditions laid down for joint and several debtors, and he may in case of notorious depreciation of the goods pledged apply also for their seizure in advance.

The law also lays down rules to be followed in case of the death, legal incapacity or absence of the debtor and in case of the transfer of his goods.

As long as the contract is in force, the debtor is obliged to allow the creditor to inspect the goods pledged. It may also be agreed in the contract that the debtor shall send periodically to the creditor a statement of the condition of the goods and an account of the sale of live stock and produce, always supposing that the price realized is to be devoted to the payment of the debt.

Lastly rules are also laid down concerning the penalties which are incurred by the debtor who abandons the goods pledged, to the damage of the creditor and independently of the liability of the person with whom they are deposited, or who disposes of goods pledged as if they were not subject to the pledge, or who pledges other persons' goods as if they were his own.

E. F.

DUTCH EAST INDIES.

A CREDIT BANK FOR CROPS IN THE DUTCH EAST INDIES. — *Javasche Courant* (Java Official Journal), No. 68 (supplement). Batavia, 26 August 1921.

In October 1918 a group of financiers, who foresaw the approaching economic crisis, drew up a carefully considered scheme for the foundation of a bank of auxiliary credit, with the view of granting loans towards the

growing of any crops that stood especially in need of such support. But the crisis did not take place so soon as was anticipated. The said group did not, therefore, pay up the capital, and did not take any further measures, remaining inactive till 1921.

In that year, however, the conditions under which the greater part of the cultivation was carried on became somewhat difficult and the intervention of the group became necessary.

By the law of 3 August the *Cultuurhulpbank voor Nederlandsch-Indië*, a joint-stock company was formed with head-quarters at Batavia.

The Board of Directors has power to open branches wherever it appears necessary.

The aim of the company is the increasing of cultivation. The means employed to the end consist in the granting loans to agriculturists, in the purchase of holdings of associations — for the purpose of resale — and in other forms of assistance considered profitable by the Board of directors.

The share capital amounts to one million florins and is divided into one hundred shares of 10,000 florins each.

Of these hundred shares, 81 were allotted immediately after the establishment of the bank among those who had united to bring it into existence, that is to say 25 to the *Nederlandsche Handelmaatschappij* (Dutch Trading Company), 25 to the *Nederlandsch-Indische Handelsbank* (Commercial Bank of the Dutch Indies), 25 to the *Nederlandsch-Indische Escompto Maatschappij* (Discount Bank of the Dutch Indies), two the Messrs. Tiedeman and Van Kerchem, two to Messrs. Geo. Wehry and Co. and the remaining two to Messrs. John Peet and Co.

There were nominated as members of the Board of Directors the representatives of the companies and firms above mentioned and as chairman the Director General of Agriculture, Industry and Commerce or his deputy, that is to say, another official designated by the Government.

H. M. R. L.

RUSSIA.

THE PROBLEM OF CREDIT FOR RUSSIAN AGRICULTURE. — *ЭКОНОМИЧЕСКАЯ Жизнь* (*Economic Life*), No. 25, Moscow, 2 February, 1922.

The discussions of the Council of National Economy directed towards the solution of the problem of long and short term credit for agriculture have reached the following conclusions. In consideration of the fact that the means at present available do not permit the creation of a special agricultural mortgage bank, as would be desirable, there has been established on the part of the Bank of the State, for the purpose of granting agricultural credit, a special fund amounting to at least 100 million gold roubles. The fund is to consist of three parts: 1. a fund for the granting of loans to the poorer peasants; 2. the fund for agricultural credit, properly speaking; 3. a fund for the granting of credits with a view to the development of particular kinds of cultivation and for the carrying out of agricultural improve-

ments. Since commercial transactions in land are no longer possible, it cannot represent the basis of mortgage credit, so that yield has to take its place for that purpose. The amount of credit to be granted has to be fixed by estimating the capital value of a given portion of the yield of the land. The granting of loans is arranged through the medium of the co-operative credit banks. The interest and the instalments of repayment are to be reckoned in gold roubles. Short term credit, on which the major number of the operations are based, must be granted for a maximum period of a year, and be guaranteed by the property of the debtor; long term credit for the general reconstruction of farms must be granted for a period of from one to six years and be guaranteed by the produce and any new acquisitions of buildings, etc; finally long term credit for improvements must be guaranteed on the joint and several liability of all those belonging to the agricultural association concerned.

M. T.

Miscellaneous Questions relating to Agricultural Economy

ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

MISCELLANEOUS INFORMATION.

INTERNATIONAL QUESTIONS.

THE THIRD INTERNATIONAL CONGRESS ON THE TEACHING OF HOUSEHOLD MANAGEMENT. — *Bulletin de l'Union du Sud-Est*. Lyons, May, 1922.

The Third International Congress on the teaching of Household Management arranged by the International Office of Household Management Instruction with headquarters at Fribourg (Switzerland), was held in Paris from 18 to 24 April last. Thirty-three nations were represented there, and the membership roll included 400 organizations and more than a thousand individuals. Several hundred enquiries had been undertaken in view of it, and served as the basis of general reports to which the discussions related.

This Congress was the first of the kind to be held since the war. In 1908 there was one at Fribourg and another at Ghent in 1913. It was particularly interesting to gather the impression of all the members of the Congress on the position of domestic science teaching at the present time.

Household management is either urban or rural. In both cases the instruction has the object of preparing young girls for looking after a house and a family, whatever may be their condition in life. But the instruction given in rural districts must also be in farming. As the preamble to the resolutions passed by the Congress puts it, instruction in town household management may be considered as a complement of general education, while farmhouse management is a branch of occupational education.

In regard to instruction in farmhouse management, the following resolutions were passed:

1. *Primary, secondary or higher elementary school education.*

"Instruction in farmhouse management, including the knowledge of family training, must find its way into the syllabus of all rural primary, secondary or higher elementary schools.

"These ideas are to be imparted with exactness, and to be accompanied by practical exercises.

"As far as possible, these practical exercises must be carried out under conditions resembling those in which the students will later on have to apply their knowledge.

2. *Farm instruction properly so-called : Local and travelling classes.*

"It is between 16 and 20 years that girls gain most from instruction in farmhouse management: efforts will therefore be made to set up universally after-school instruction of the kind for girls of that age, and to give opportunities for practice, carried out as far as possible by collaboration between the instructor and the student.

"This instruction will be purely on farming subjects. Girls must be given the theoretical and practical knowledge that will make them good farmers' wives. A taste for family life should be implanted, and the tendency of girls to drift into the towns discouraged.

"All types of after-school instruction in farmhouse management are to be recommended: but wherever it proves possible to have a school with continuous instruction, with the use of an agricultural holding, such would have the preference.

"The examinations should not merely be a test of the comprehensive memory possessed by students, but should furnish a proof of their capacities, of their resourcefulness and their suitability for the family life of a farm.

"The local authorities will attach a primary importance to providing accommodation for the travelling schools on strictly hygienic lines, and with the greatest possible degree of comfort, in view of the importance of the instruction and the health of the students and instructresses.

"The length of the courses of the travelling schools must be adequate.

"It is desirable that Study-Circles of farmers' wives should be formed wherever possible, such circles to do everything possible to improve the education and the professional capacities of women in agricultural life by means of lectures and other schemes for popularizing the matter and arousing rivalry.

3. *Training schools of farmhouse management.*

"In these colleges a special type of education will be carried out, adapted to the aim in view, namely that of turning out students possessed with the desire of producing more, of better quality and at less expense, with less physical fatigue, and possessed too of a sense of duty and an elevation of mind.

"The training colleges of farmhouse management should direct their instruction towards the gradual improvement of the methods of the district rather than towards the immediate adoption of the most highly improved methods, the study of which should be reserved for the higher courses.

"It is desirable that the public authorities should encourage in every

way and in as large a measure as possible, training in farmhouse management, both by taking steps to develop State training colleges and in giving support to private training colleges.

"It is desirable that side by side with the body of instructresses in household management, there should be formed a body of women advisors on the subject, nominated by the Government or by agricultural associations, whose business it would be to encourage the teaching staff, to establish harmony in the methods, and above all to keep the instructresses in touch with new ideas."

M. B.

AUSTRIA.

1. LAW OF 29 OCTOBER 1921 REGULATING CONDITIONS OF FARM LABOURERS IN STYRIA. — *Öffentliche Nachrichten des Oesterr. Bundesministeriums für Soziale Verwaltung*, N. 5, Vienna, 31 May 1922.

The chief points of this law are as follows :

The hiring agreement is concluded between the employer and worker, either orally or, on the request of one of the parties to the agreement, in writing. The commencement of the period of work is fixed by the yearly agreements at 1 January and the expiry at 31 December (§ 5).

The length of the day's work is regulated on the basis of local customs. The time of work is usually that of the daylight hours. On an average throughout the year the day's work is of ten hours (§ 10).

In case of need extra hours must be worked. If necessary this also applies to Sundays and festivals and to the night hours. Remuneration for these hours is from 50 to 100 per cent. more than that for the regular hours of work (§ 14).

The year's wage must be divided in accordance with the agreements in such a way that 40 per cent. is allotted to the winter months and 60 per cent. to the summer months. After five years' work without a break for the same employer, the labourer has a claim to a special bonus of 25 per cent. of his last year's wage. If the services have been given for ten years without a break, he is entitled to a further bonus of 50 per cent. of his last year's wage. For every five years more, the bonus increases by another 25 per cent. (§ 13).

If he has remained in the same employment for at least a year, the labourer is entitled to three days' leave on full pay ; if for at least two years to a week's leave ; if for at least five years, then to two weeks' leave on the same conditions (§ 15).

The labourer who is prevented from doing his work by illness or accident, happening through no fault of his own, has the right to full pay whether in cash or kind, as well as to appropriate care and medical treatment for a period of from four to eight weeks. Beyond that period the expenses must be met with the means publicly provided (§ 18). The employer must not assign to expectant mothers work which is clearly dangerous in their condition, nor can pregnancy be a cause for dismissal (§ 19). The agreement can be cancelled either without notice or on a

fortnight's notice, on cause arising which prevents the continuance of the relation, such as acts of violence, serious offences, threats, immoral conduct, etc., and this applies equally to either side (§ 8).

The observance of the provisions of this law is to be a matter for the vigilance of the State authorities. Contraventions are punishable by fines up to 4,000 crowns or by imprisonment up to eight days, and in the case of a second offence provision is made for a fine up to 20,000 crowns or an imprisonment up to 14 days. Money paid in fines is passed to the poor of the communes. Against the decision of the district authorities there is an appeal allowed at the end of fourteen days to the provincial government (§ 29).

M. T.

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2. THE NEW LAW FOR INCREASING THE ALLOWANCES MADE TO THE "AUSDINGER" (RETIRED SMALL FARMERS OR LABOURERS).

The prevailing economic situation incident on the peace has rendered peculiarly difficult the circumstances of those who depend on fixed incomes: and this is especially so in the case of the "Ausdinger" as those agriculturists are called who have handed over their farms altogether to sons or to others, in return for an undertaking on the part of these latter to contribute to the expenses of their maintenance, in a measure definitely fixed by agreement. By this term is mostly meant people of advanced age, either wholly or virtually incapacitated from earning a competence by their own work, who have a home of their own, often a little cottage with a garden, and receive a small regular allowance. By "Ausdinger" is also meant persons of both sexes, who have worked for many years on a farm and receive regularly by agreement a certain sum of money.

With the aim of ameliorating the lot of these people, the National Council promulgated on 27 October 1921 a law for the increase of the allowances paid to "Ausdinger" (*Gesetz über die Erhöhung von Geldausdingerleistungen*), to be found in the *Bundesgesetzblatt* of 2 November, 1921, No. 598.

The essential provisions of this law are as follows: If in a contract, agreed to before 1 January 1920 and relating to the transfer of a farm or forest holding, there is stipulated a periodical payment of an allowance to the outgoing owner, which according to the evident intention of both parties should have secured either in full or in part the maintenance of the latter, the interested party is empowered to demand either a corresponding increase of the allowance or a commutation by addition of an equivalent quantity of goods in kind. The same principle is applied to periodical allowances, stipulated by agreement, dated before 1 January 1920, and with similar intention in respect to labourers, as recognition of the long services rendered by these latter on a farm.

The request may also be put forward in respect of an owner who has come into possession in succession to the person originally a party to the

agreement, with this limitation however, that the right to an allowance in that case must appear from the Cadastral Survey.

The court before which the application comes decides on the question according to equitable principles and the usage of the district and locality; in particular it is bound to ascertain if the profits of the owner of the farm are so much larger as to make it possible to impose on him this fresh burden.

In the event of the appreciation of the currency, if, that is, the increased allowance should come to be in excess of the needs it was intended to supply, the person bound by the agreement to make the payment may in his turn make an application for the reduction of the allowance formerly increased.

The district tribunal, in view of an application for increase of the allowance or its commutation into payments in kind, must endeavour to bring about an amicable arrangement between the parties. If this proves not to be possible, it is then the duty of the tribunal to give a ruling, after having heard the evidence of competent persons acquainted with the local conditions. Against the decision of the tribunal of the second instance there is no appeal allowed. As to the question of the incidence of the costs of the legal proceedings, the court decides, with discretionary powers.

The time from which the increase of the allowance applies is fixed by the court.

No application can be made for a fresh increase, and this holds equally with respect to a reduction, before the lapse of at least six months from the carrying out of the former judicial decision increasing the said allowance.

The law is the first of a series of social legislative measures for the protection of persons of advanced age and unfit for work, whose capital or allowances are only on a pre-war basis.

H. KALLBRUNNER.

LAND SYSTEMS

MISCELLANEOUS INFORMATION.

AUSTRIA.

THE LAW OF 20 DECEMBER 1921 RELATING TO THE MODIFICATION OF LONG TERM AGRICULTURAL LETTING AGREEMENTS.

On account of the continued depreciation of the Austrian currency, it frequently happens that rents due to landowners from tenants holding on long term letting agreements are much lower than the taxes that the owners have to pay on their land, since the rents remain unaltered while

the rate of the taxes has been placed in relation to the depreciation in the currency.

In order to make good the resulting loss to owners, the National Council has promulgated the Law of 20 December 1921, relating to the modification of agricultural long term leases (published in the *Bundesgesetzblatt* of 29 December 1921, No. 270).

The most important provisions contained in it are the following:

The landlord can demand the modification of letting agreements of any kind, in respect to forest or agricultural undertakings, to lands, or to shooting or fishing rights, concluded for a period of more than three years from a date previous to 1 January 1921, if the rent agreed on has become disproportionately small in consequence of the advance in prices of farm products subsequent to the conclusion of the agreement, or in consequence of the increase of the State dues (taxes and supplementary levies) burdening the property and falling heavily on the landlord; and this notwithstanding the original agreement as to the proportion of the same rent.

In judging of the equity of an increase, regard must be had to the proportion in which the landlord and tenant are obliged to invest capital in the farm. In the case of small holdings, it must be ascertained if the tenant, his economic situation being what it is, is in a position to pay a higher rent. In dealing with letting agreements relating to small gardens (*Schrebergärten*), the rent is put up only so much as is justified by the increase in the rates and taxes chargeable on the tenancy and falling on the landlord. Where a fall of prices or a reduction in the taxes takes place, the tenant can demand on his side a reduction in the rent as increased, but not so as to fall below the original proportion fixed. Following on the application of the landlord for the raising of the rent, the district tribunal within whose area the farm is situated or the undertaking is carried on must in the first place try to effect an amicable arrangement between the parties: when this cannot be brought about, the said tribunal is to give a summary decision, after having given a hearing to persons cognizant of the facts of the case.

If the application is favourably received, in default of an agreement between the parties, the district tribunal must rule that the increased rent must be paid from the beginning of the year of the letting agreement following the day on which the application was put forward. If the landlord put forward the request for a rise in the rent within four weeks of the coming into force of this law, the district tribunal, in so far as the circumstances of the case justify it, must recognize that payment of rent was due for the current year of the contract. If the rent for the year of the agreement ended or ending within the year 1921 did not reach the amount that the landlord was called upon to pay whether in State taxes or supplementary levies on the land, or in fire insurance premiums, the district tribunal was to grant the increase retrospectively up to the amount of this sum, always supposing that the landlord made application for it within four weeks of the coming of this law into force.

If the increase of rent is sanctioned, the tenant can legally bring the lease to an end at the end of the contractual year, giving at least three months notice notwithstanding any length of time originally agreed on.

If an application for increase of rent has been granted, no others can be granted in the same year.

If in a letting agreement of the aforesaid kind it is agreed that at the end of the contract the tenant must hand over, or the landlord take over, cattle, tools, forage, seeds, or other requisites at a price fixed, the party who stands to suffer a loss inequitable in comparison with the advantages gained by the other from the contractual relation, may demand a corresponding modification of prices.

Dr. H. KALLBRUNNER.

EGYPT.

THE SUBDIVISION OF LANDED PROPERTY. — CASORIA (Matteo): *Chronique agricole d l'année 1921*, in *L'Egypte contemporaine*. Cairo, January 1922.

Working from the official statistics as to the division of landed property, M. Casoria notes the fact that Egypt is following the same downward path as the European countries in the matter of the subdivision of land. Kitchener's law as regards holdings of under five feddans (two hectares, ten ares), undoubtedly had a salutary effect, but it could not even so check the downward movement increasingly noticeable.

As a matter of fact in the class of proprietors of from one to five feddans we find:

In 1913 468,628 proprietors: 1,013,364 fedd. average 2.0321 fedd.

In 1920 506,025 » 1,064,137 » » 2.0211 »

Difference 37,397 additional proprietors with a reduction of 0.0110 feddans in the average holding.

Glancing at all the classes, we see:

	1913		1920	
	Proprietors	Feddans	Proprietors	Feddans
Less than one feddan	942,530	405,595	1,207,694	485,045
From one to 5 feddans	468,628	1,013,364	506,025	1,064,137
From 5 to 10 "	76,337	528,706	79,767	551,276
From 10 to 20 "	56,623	505,344	38,707	533,563
From 20 to 30 "	11,155	271,385	11,866	287,921
From 30 to 50 "	8,479	327,978	9,180	352,783
More than 50 "	12,558	2,420,558	13,512	2,261,527
Total . . .	1,566,310	5,472,930	1,866,761	5,536,252

The number of proprietors in each class has perceptibly increased between 1913 and 1920, while the area has remained nearly the same.

It may be noted that in the class of owners of more than 50 feddans, including the large agricultural societies, there has been an increase of one thousand proprietors, against a decrease of 160,000 feddans which have of course gone to increase the number of proprietors of less than 50 feddans.

The fact that gives food for reflection in regard to the future of land holding in Egypt, considering the discontent due to this extreme subdivision of the land, is the increase in the number of proprietors who possess less than one feddan (42 ares). From 942,530 in 1913 they have risen to 1,207,694, in 1920.

M. B.

MEXICO.

THE ESTABLISHMENT OF MILITARY AGRICULTURAL COLONIES. — *Diario oficial*, No. 59. Mexico, 14 November 1921.

By the decree of 30 September 1921 regulations are prescribed by the Federal Government of Mexico as to the agreements for purchase and sale of blocks of land, intended for the establishment of military agricultural colonies.

These colonies are formed with the object of encouraging and increasing the colonization of the country, and at the same time of rewarding certain classes of soldiers belonging to the First Reserve of the Army for services rendered to the Republic.

These soldiers have the right to acquire blocks of land, the price of which is divided into 20 annual payments, due at the end of each agricultural year beginning from the second of the purchase, without payment of interest.

The decree enacts that the soldiers while remaining in the colony shall be subject to military discipline, up to such time as they are finally discharged from the army. On the same terms those who are still serving in the army before transfer to the reserve will be able to take part in these colonies.

Administrative Bodies. — The administration of the colonies is in the hands of the office of the Secretariat of War and Marine, including the Chief of the Department of the First Reserve, and the Section of Military Agricultural Colonization. To these last falls the business of the formation, the organization, the development and the oversight of the colonies. The office of the Secretariat of War and Marine has the power of fixing the prices and conditions of the purchase of lands bought for colonization, on the basis of negotiations made in regard to it and of information received: such information will then be passed on to the Section for the Colonies of the First Reserve. A specially appointed Technical Committee will direct the work of laying out, taking care that the colonies are of a regular shape, corresponding to a certain symmetry in their division. In the middle of the area to be colonized, or wherever

is most convenient, there will be reserved a space of 50 hectares, if possible in the shape of a square, intended exclusively for town plots. After fixing the portions of this area to be used for public buildings, squares, markets, etc., the remainder is divided into blocks.

The assignment of the blocks of land is done by a system of drawing lots, and the size of them is subject to modification, whenever the Technical Committee require it.

Organization of the Colonies. — The number of persons composing each colony is not to be less than 50, nor more than 200, unless there are special reasons justifying a larger or smaller number.

To avoid any want of harmony among those living in the same colony, the law enacts that, except in the case of there not being enough persons of one kind, each colony is to be occupied by persons having the same military rank. To meet this need three classes of colonies are instituted for three different grades of officers.

These colonies are made up of lots, of which the maximum area is as follows: 30 hectares of irrigated land, 30 of land depending on rainfall, and 150 of pasture for officers of the first grade; 20 hectares of irrigated land, 30 of land depending on rainfall and 100 of pasture for officers of the second grade; and 15 of irrigated land, 30 of land depending on rainfall and 100 of pasture for officers of the third grade.

Conditions for Obtaining the Assignment of Lots of Land. — To obtain a grant of land the applicants must show: (a) that they belong to the First Reserve of the Army; (b) that they do not possess sufficient means to build up an independent position; (c) that they are twenty years of age, if single, and eighteen, if married; (d) that they have a good previous record. An applicant who fulfils all the conditions required by the law is granted the right of purchase of a lot of land in one of the colonies, and if possible in the colony for which he has indicated a preference.

Inheritance. — In the case of the death of a colonist in full enjoyment of his rights, his heirs will have power to carry on agricultural work and to represent the deceased in everything relating to the obligations he may have incurred towards the Government. With this intent the legal status of the heirs is regulated according to the municipal law of the place where the inheritance is entered on. If any colonist can no longer devote himself to working the land, he may designate a person competent to replace him, or he may request the authorities to transfer his lot. In both cases the decision rests with the Secretariat of War.

In the same way, if the heirs of a colonist are not competent to bring the land fully under cultivation, they can request the authority to grant the lot to some one who undertakes to fulfil the contract with the Government.

Lands Suitable for Colonization. — Military agricultural colonies will be established in localities that offer the best conditions for their development. In effect, the law declares suitable for colonization: (1) state lands situated in the fertile zones of the different States of the Republic, where the fertility, water supply, and nearness to markets and railway

stations, all conduce to successful agricultural development; (2) land adjudicated to the Federal Government, either freely or with charges attached, granted for the purpose by the Government itself; (3) country estates and the lands of private owners suitable for farming and bought by the Government for colonization.

According to the Decree the land is to pass to the colonists free from any kind of burden. Where there are necessarily mortgage charges, it is provided that to avoid all possible losses to the colonists, the debt is to be discharged by agreement with the creditors in the way least inconvenient to the Government.

If the lands acquired are national or form part of the land adjudged to the Federal Government, their transfer for colonization remains subject to the rules laid down by the Government itself, in accordance with laws relating to the matter.

Whenever there is not a sufficient extent of land suitable for colonization to meet the applications, the lots of land will be reduced in proportion to the grants made; but the colonists will retain the right to the full grant, when the Government has acquired land sufficient to meet all demands.

Conditions of Payment for Lands Bought. — The colonists must undertake payment for the allotment made to them in twenty annual instalments, as we have already mentioned, proportionate to the amount of their debt. In the meantime they will receive provisional title-deeds, which will be exchanged for deeds of full possession when they have made the last yearly payment, thus amortizing the price of the land. This amortization must be made in coin having legal currency; but the colonist has the option of discharging the debt to the Government even before the limit of time is reached, without however any discount or reduction of the total sum payable.

The security given by the colonists for payment is the value of the land and of the agricultural implements and machinery belonging to it the property remaining burdened with this obligation, which has priority over any other debt.

Rights of the Colonists. — The colonists have the right to take possession of their lots, and of the agricultural implements, in accordance with the agreement made; to receive what is due to them, to the extent and in the form prescribed by law; to solicit from the Government the gratuities necessary for the expenses of working their lands; to apply to the Secretariat of War and the Marine to send regularly agricultural experts to give instruction to the members of the colonies in modern methods of cultivation and in remunerative agricultural processes; to ensure the supply of elementary education and the means of setting up a public library; to request from the Government, through the medium of the Secretariat of War, the necessary advances for the expense of removal of themselves and families.

The only sums repayable by the colonists are those intended for getting the land into order and for buildings.

Obligations of the Colonists. — The colonists are under the following obligations : to cultivate their land intensively ; to make their payments punctually according to agreement ; not to cut the trees, nor to destroy the fences ; to begin working the land not later than thirty days after it is assigned to them ; to fence it at the end of five years if it is more than 50 hectares, and in three years' time if it is of less extent ; not to alienate nor to encumber in any way the land, the agricultural implements or machinery received from the Government until they have paid full value for them ; and finally to register their deeds of ownership.

Further within the first five years the colonist must keep at least one half of the land in full working, and must complete the cultivation of it in the following five years. If this stipulation is infringed it may entail deprivation of that part of the land which has not been turned to account. If in two consecutive years the annual payments are in arrears without good reason, the colonist will be deprived of the grant of land. Once this deprivation is announced, the land may be sold, on the conditions laid down by the law, to anyone who makes the application with a proper claim, provided that he undertakes to pay in full and in the same manner the price which was paid by the former owner for the land, for the improvements made in it, and for the implements.

During the time that the colonists remain in the debt of the Government, the blocks of land granted to the members of the colonies are exempt from any kind of seizure, and this exemption includes the implements, the agricultural machinery and the animals required for field work.

The first colonists can set up in each colony a Council of Management composed of three members, who will make it their business not only to direct the development on commercial lines, but to administer the colony and to supervise the conduct of the persons composing it.

In each colony there will be an inspector, nominated by the Department, with the approval of the Secretariat of War, whose functions will be primarily to represent the Federal Council at the Council of Management, to watch the progress of the colony, and to safeguard the interests of the Government in the colony.

Advantages Enjoyed by Colonists. — The colonists of the military agricultural colonies will enjoy, for ten years, the following advantages :

1. Exemption from military service, provided that such service is not required for foreign war ;
2. Financial assistance, the amount of which will be fixed by the Secretariat of War, for the purchase and transport of building materials ;
3. Prizes awarded by the Secretariat for exceptionally productive farming, and special assistance in the introduction of new crops, a feature of immense importance to the progress of the colonies.

The Inspector of Colonization is to exercise vigilance to ensure that the Government gratuities are used for the maintenance of the colonists, informing the Department in the case of their being diverted from the object laid down by the law, or not being properly utilized.

With the aim of forestalling difficulties that may arise from the

shortage of articles of prime necessity, or from a sudden and extraordinary rise in the price of food, it may be made obligatory for the colonists to establish a co-operative distributive society with a fixed capital, which will be advanced by the Secretariat of War. E. F.

FRENCH PROTECTORATE OF MOROCCO.

FRENCH COLONIZATION IN MOROCCO. — LADREIT DE LACHARRIÈRE (L.): *La Colonisation française au Maroc*, in the supplement of *L'Afrique Française*, Paris, April, 1922.

French colonization in Morocco presents great difficulties, from the fact that the Morocco Berber is much attached to his land, and that native property is established, in spite of deceptive appearances, on a very clear title. Without going into the theory of property in Moslem law or in Berber usage, we may say that lands held collectively are those which lend themselves most readily to the official establishment of a colony. It is in no way a question of despoiling the Djemaas owners, but these joint holders can be brought to form some idea of the advantages that will accrue to them from the turning to account of a portion of their patrimony which up to now has been unproductive. This intervention of authority must however in no case become an exercise of pressure, and in the words of the Resident General "in such matters, we cannot display too much caution. To go too fast is to risk spoiling everything: we have to reassure minds that are too prone to see in this taking up of tribal lands the first signs of a forcible seizure. To reassure these natives, not only by words but by deeds, to give them a guarantee that we are not anxious to dispossess them but rather to make them share the economic advantages that we bring with us, is not work that can be done in a hurry."

The point of view of native policy, important as it is, is not the only one to be considered. The colonist himself has to be protected against undue enthusiasm, and precautions at first sight hampering, but calculated to ensure the end in view, are essential to the prosperity of the country. The Resident General lately pointed out, in response to an enquiry as to the advantage of directing a stream of emigration towards Morocco, that administrative action must here too proceed with extreme caution. "In regard to immigrants who propose to take up agriculture, the scarcity of State lands, the only land at our disposal at present, the high price of building materials, of tools, and of transport, all these things have combined to make us relinquish the idea of free allocation of blocks of land for colonization; a gift of that kind would only be a trap, since the purchasing price, of the land represents only an insignificant part of the capital required for bringing the holding under cultivation. In the present state of the economic organization of Morocco, badly equipped as it still is as regards means of communication, the Committee of Colonization were of opinion that the small holding was not a proposal

in which they could interest themselves, and an exception could only be made in favour of suburban allotments, confined to the production of vegetables, poultry, etc."

The fact is that while the natives can carry on life with the equipment of a less developed civilization than that of Europeans, these latter cannot adapt themselves to the want of means of communication, still a very serious matter. Nor can they adapt themselves to a precarious hold on the land, with which the son of the soil is quite satisfied. It is not so long ago that transactions in real property in Morocco used to assume the appearance of a farce, ending in the complete discomfiture and robbery of either the colonist or the native.

However this may be, at the same time as the Resident General gave his attention to the road system, he put land holding on a sound basis (Dahir of 12 August 1913 on land registration) and afterwards regulated the alienation of land held in joint possession (Dahir of 27 April 1919). This Dahir provided for three methods of utilizing these lands for Europeans: letting, sale, and co-operative holding.

As regards leases, serious colonists, really desirous of bringing the land under cultivation, can get from the supervising authorities all information that will put them on the right track and prevent them from wasting time and capital. This action of the local authority is especially marked in the case of the landholding Djemaas. Every Djemaa, however small a group it represents, has the power to let. Leases of less than three years can be arranged mutually: longer leases are submitted for approval to the Council of Wardship, as well as to formal adjudication, but this is as much simplified as possible, and the right of preference recognizable for everyone who by his personal efforts has maintained a special interest in the property now being alienated, safeguarding the prerogatives of the first candidate to the lease. As a final advantage, the present legislation permits of the changing of the ten years' lease into permanent possession.

As regards the sale of lands held in common, they can only be bought by the State, a measure ensuring the colonists against excessive heightening of the price of land. These lands are bought by the State at their fair value, and are then reassigned to the colonists at prices which vary according to position, and condition and character of the soil, but which cannot be considered prohibitive. The State lands, whence the majority of the blocks of land for colonization have so far been taken, have been granted at prices much lower than 7 or 800 francs per hectare, a figure necessarily reached in the case of purchase from private individuals, and considered excessive: such prices apply to uncleared lands. The valuation of the blocks of land has moreover always been done by committees including not only the officials of the departments concerned, but also representatives of the agricultural colony. The majority of these blocks have been granted at about 200 francs a hectare, not one has been as much as 400 francs, and the concession by which the holder can discharge his debt in ten yearly payments without interest con-

stitutes an unquestionable advantage. The purchase and reassignment of the collective lands by the State allows of the grouping of average sized blocks in such a way that the holders benefit alike by the advantages of association and by the facilities that the Protectorate has taken pains to provide, namely paths, roads, wells, postal and telegraphic facilities, in fact, the economic apparatus necessary to the life of an organized centre. More than that, the colonization areas, formed by the purchase of lands owned collectively, are so planned as to allow of the placing side by side of at least ten average sized blocks of land, this after any necessary exchanges and re-groupings. This ruling idea has never been lost sight of, and it is in this way that it has been possible to create settlements such as those of Petit-Jean (5,000 hectares), Beni-M'Tir (3,200 hectares) Hadj Kadour and Ait Harzala (4,700 hectares), Bethma Guellafa and Douiet (7,000 hectares). In this way the colonists have every facility for joint purchase of the improved implements necessary for carrying on agriculture on business lines, to bring the soil under cultivation in a shorter time, and to increase the yield. As regards motor-culture, the Protectorate has introduced a system of bounties paid to farmers who are using motor machinery. Although the employment of these machines ensures rapid work, and therefore increase in the quantity of land sown with corn and reaped at the right moment, it cannot, at least in present circumstances, be considered economical, owing to the high price of motors, the requirements of mechanics, etc. Even if the machines are grouped in sets, and a repairing shed is available, the net cost per hectare considerably exceeds that resulting from the use of draught animals.

Since 1918, the year when official colonization began, the State has granted to colonists 48,000 hectares, the allotment made in each year being as follows :

1918	7,215 hectares
1919	11,246 "
1920	11,191 "
1921	18,272 "

47,924 hectares

Out of these 47,924 hectares, 37,479 have been granted to colonization on a medium scale. On the one hand, as was said above, a too hasty development of small holdings would be premature, since the high price of building materials would impose on the colonist investment of capital out of proportion to the returns from the soil : on the other hand, colonization on a large scale, that is of from 400 to 3,000 hectares, is, generally speaking, harder to accomplish, because of the extensive areas and large capital needed. On the contrary, to farm lands of 200 to 400 hectares which is what is meant by colonization on a medium scale, requires no very extraordinary outlay of funds. The conditions of admis-

sion into the country for 1920 fixed the capital which a candidate for a block of land must have at his disposal at 70,000 francs.

We may add that the blocks of land are given out, by a system of drawing of lots at different times, as follows: 25 per cent. to disabled service men; 50 per cent. to persons who have lived in Morocco for two years, and who though they came with the intention of taking up agriculture, have not yet found an opening; 25 per cent. to immigrants.

M. B.

ROUMANIA.

THE RESULTS OF THE AGRARIAN REFORM.

In the course of a speech made during the reception in his honour at the International Institute of Agriculture, 2 May 1922, M. Alexandre Constantinescu, Minister for Agriculture of the Kingdom of Roumania, described the results of the agrarian reform carried out in his own country in the following words:

" Fifty years ago, Roumania was wholly a country of large estates, I might even say of latifundia, for thousands of hectares of cultivable lands were concentrated in the hands of the same proprietor. In consequence of the agrarian legislation which has since been passed and especially since the last law of 1918, now in course of execution, the character of landed property has entirely changed. As a result of this recent law and by the stroke of a pen, five million hectares of arable land have passed from the hands of the large owners into those of nearly 1,500,000 peasant heads of families. I am hoping that this year in my capacity as Minister of Agriculture I shall have the satisfaction of seeing the final accomplishment of this great agrarian reform. When that is done, out of a total of 13 million hectares of arable land, possessed by Greater Roumania, 12 million will have definitely passed into the hands of about four million peasants, in separate lots, varying from one to five hectares according to the region and the density of the population. One million hectares only will remain in the hands of about 6,000 owners, an average of from 100 to 200 hectares per head; their estates are no longer large but medium sized only, and a tendency is noticeable among these owners to sell the remaining land to the peasants, who display great eagerness to purchase.

" Thus Roumania, formerly a land of latifundia, has become in 1922 virtually a country of small holdings.

" These far-reaching changes, though dictated by social requirements, have for the moment an unfortunate disturbing effect on the economic system of the country, an effect taking the form, perhaps for a decade, of a reduction in the total production of Roumania. Time must necessarily be allowed for the formation of peasant associations, co-operative societies and their federations. The development of these organizations on a solid foundation is proceeding rapidly enough for them to come in their turn to replace, both as regards capital and as regards application of

science to agriculture, what has been lost to us by the disappearance of the large owner.

"This temporary diminution of production is largely balanced even today by the solidarity resulting from the great measure of land reform - a solidarity which is our best guarantee that in a short space of time, in an atmosphere of social peace and fraternal concord, we shall not only regain what we formerly had but that also far more will be added to us".

SWITZERLAND.

CONCILIATION COMMITTEE ON LAND TENURE. - *Le Paysan Fribourgeois*, No. 17. Fribourg, 13 June 1922.

In consequence of the extraordinary and rapid fall of prices, the farmers have found themselves in an abnormal position. The leases concluded on long or short terms do not correspond to the actual yield of the land.

In its session of February 1922 the Federal Council, following on a question that had been asked, discussed various measures which might receive consideration as methods of rendering the agricultural crisis less acute. The representatives of agriculture supported the idea of bringing the rents of the lands into relation with the price of the principal agricultural commodities.

On the proposal of the Directorate of the Interior and of Agriculture, Conciliation Committees were instituted with the object of giving the farmers the opportunity of discussing the conditions of their leases in the presence of experts. These committees will hear both parties concerned on the subject of the difficulties arising out of the leases, and will endeavour to enable them to come to an arrangement that will take account of the present day conditions of agricultural work.

These committees are three in number. Each is composed of seven to nine members, sitting at the chief town of the district. For each case under consideration the committee must consist of three members, of whom two are drawn from the district in which is situated the land that is the object of conciliation.

M. T

MISCELLANEOUS QUESTIONS

AUSTRIA.

THE CULTIVATION OF ALLOTMENTS DURING THE WAR.

By DR. HERMANN KALLBRUNNER.

During the war, difficulties in the food supply of the people occurred, at first only here and there, but afterwards more and more frequently, and with more and more serious results.

Even a short time after the beginning of the war, in August 1914, a considerable shortage in wheat and barley was experienced, in consequence on the one hand of the closing of the frontiers by the neighbouring belligerent countries, to say nothing of the blockade and the cautious attitude adopted by Italy and Roumania, at the time still neutral, and on the other hand of the larger consumption occasioned by the war. Of importance too were the enormous losses of flour sustained by Austria from the Russian invasion of Galicia with its great warehouses, and the losses of the harvest stocks of that region. The deficiency of breadstuff cereals became more and more marked, in spite of numerous attempts to increase production (1).

In regard to the supply of vegetables grave difficulties had to be overcome: the extensive importation of garden vegetables, more particularly the early ones, from southern countries, notably Italy and Egypt, had stopped from the beginning of the war, and the territory round Görz, a large area of production of that kind, was devastated by war: vegetable growing suffered from want of labour, of draught animals, of seeds, of fertilizers and requisites, and even the production of potatoes fell off with the reduction of the area under cultivation and of the yield per hectare (2). An attempt was made partially to remedy this difficult situation by promoting the growing of vegetables.

(1) See: *International Review of Agricultural Economics*, November and December 1921: KALLBRUNNER, Measures adopted in Austria for the Encouragement of Agriculture during the War. — DENKSCHRIFT ÜBER DIE VON DER K. K. REGIERUNG AUS ANLASS DES KRIEGES GETROFFENEN MASSNAHMEN, 4 volumes, Vienna, 1915-1918. — DIE KRIEGSGEG-REIDEVERKEHRSANSTALT. IHR AUFBAU UND IHR WIRKEN, Vienna, 1918.

(2) On an average from 1903 to 1913, 85,137 hectares were cultivated in potatoes in Lower Austria, and in 1918 only 68,619 hectares. The yield per hectare fell from 71.2 to 45.6 quintals. (See: ANBAUFLÄCHEN UND ERÄNTERGEWISSE IM GEBIRTE DER REPUBLIK OESTERREICH, IM JAHRE 1918. Vienna, 1919).

Efforts in this direction fall into two groups, according as they have reference to the small kitchen gardens in general, or to the *Industriegärten*. The small kitchen gardens are cultivated directly by individual workers or employees, and are intended to render easier the problem of individual provisioning, the impulse being not infrequently given by the commune, the State, or an employer. The *Industriegärten* on the other hand are cultivated as the appurtenance of an industrial undertaking and are intended to facilitate the provisioning of the workers belonging to it. A characteristic factor common to all these efforts, inspired as they are with a lofty moral ideal, is that here, in contradistinction to what takes place on ordinary farms, the aim is not to get the highest and most lasting money return from the land, but to achieve the largest possible production.

The small market gardens may in their turn be subdivided into two groups, urban and rural, according to locality and method of working.

§ I. MARKET GARDENING WITHIN CITY AREAS AND MEASURES FOR INCREASING IT.

The small market gardens in the cities are rarely more than 600 square metres in extent. They are generally called *Schrebergärten* after Dr. Schreber, a physician who died at Leipzig 10 November 1861 after having done much to promote the creation of such gardens in the interest of the public health.

It was not everywhere easy for the small cultivators to obtain the necessary land. The land on the outskirts of the cities favourably situated from the agricultural point of view, was always cultivated to its fullest capacity, since the very short distance from the market made production always profitable, even though proportionately high expenses had to be met for labour and draught animals. Professional vegetable growers had for a long time kept the best lands in their own hands. Hence for citizens anxious to work on the land there only remained land which being for some reason or other unsuitable or less suitable for agriculture, remained uncultivated or only used for extensive cultivation; such as building land, which was often used as a place for shooting rubbish, and lands difficult to work, either dry, too shady or difficult of access; finally lands in the immediate neighbourhood of the cities not bringing in returns to private persons, being preferably used by trippers for rest or amusements, such as cemeteries long disused, lately broken up woodland, former exercising grounds, encampments, steep slopes, places whence material was taken for making roads and railway platforms, demolished areas, brickfields, etc. Naturally each city presented its own special circumstances.

It will easily be understood that the "land hunger" was at its height in Vienna, where absolutely barren deserted spaces were transformed, by dint of unceasing toil, into flourishing gardens. Stones were picked off the ground, in many cases the soil was passed through a sieve, street

sweepings were brought, kitchen and other refuse was tried for improving the soil. Hard stiff land was treated by sprinkling sand and ashes. Clearly all these operations required the application of effort that would not have found an adequate recompense if it had been supplied by paid labour, and not voluntarily by small cultivators in their spare time.

These lands were taken up with the consent and encouragement of the Government, and also that of the greater number of the communal administrations, which, recognizing the importance of the movement, supplemented these efforts, and even took the lead with most praiseworthy schemes. Individual manufacturers also considerably assisted these undertakings.

The following decrees of the Austrian Government among others are important, intended as they are to direct on the one hand the utilization of all cultivable land for food production, and on the other the acquisition of land by small cultivators: the Decrees of 15 February 1915, of 3 March 1915, of 21 October 1915, of 1 March 1916, of 11 October 1916, of 26 February 1917, of 31 January 1918 (1). The substance of these measures was as follows:

The district authority may order, with the object of ensuring the food supply of the large centres, that agricultural lands situated in the neighbourhood of these centres be given up to the cultivation of vegetables or potatoes, and may assign these lands to communes, to large business undertakings and establishments, to individual growers or to associations of small vegetable growers.

Before the decision is taken, the owner of the land must be a party to it. At the time of the assignment of the land, the authority must issue instructions as to the kind of cultivation to be followed, and the amount of rent to be paid by the party to whom it is assigned.

The land must not be left untilled. All forage growing on it must be utilized.

Within the limits of what was possible, and in spite of many difficulties, efforts were made to carry out these regulations, and these efforts usually succeeded when there were small cultivators ready to put the land under cultivation.

The execution of the work was not in reality always easy. As the new cultivators came only in part from rural districts, they were not to begin with skilful in the handling of implements and they lacked experience. They endeavoured to gain such experience by watching as far as they could their more capable neighbours; then by studying manuals of horticulture published by specialists of the different Government offices. Of more utility were the efforts of the organizations among the small cultivators, which by means of courses and instructive articles in the journals of the associations tried to increase the knowledge of their own members. The public authorities lent their aid to this work in various

(1) Contained in the *Reichsgesetzblatt*, Nos. 38, 55 and 317 of the year 1915, Nos. 59 and 352 of the year 1916, No. 74 of the year 1917 and No. 37 of the year 1918.

ways. The courses were very well attended. Thus the courses for the breeding of small live stock, held in close connection with the courses in vegetable growing, were attended between 1 August 1914 and 1 June 1916 by 23,754 persons. Each course lasted four weeks and was usually held on a kitchen garden or on premises for the rearing of poultry or small live stock.

Another difficulty in the management of small gardens was the lack of implements. The associations of small cultivators tried as far as possible to remedy this by the collective purchase of tools and necessary articles. Naturally mutual assistance among neighbours and the spirit of enterprise greatly contributed to minimize this inconvenience, and generally speaking throughout the work the spirit of co-operation was displayed to great advantage.

A serious hindrance to the work of the small growers was the great distance, especially in Vienna, between the homes and the market gardens. It was only possible for a few to get strips for gardens at all near to the town area. The majority had to walk a long distance in the city and then through the market gardens to come to their own bit of land. And since the work was done as has been said only in spare time, it was absolutely impossible for many to make provision for work during the week, which naturally seriously prejudiced the proper development of the crops. Another inconvenience was that the town houses were not fitted up for these accessory occupations; there was no room to put the tools, the produce and the poultry.

Many of the gardens created *ex novo* suffered from lack of water. A certain number of communes laid pipes to the new belts of land put under cultivation, allowing the use of the water either free or for a trifling payment. At Vienna, for example, the water could be had for nothing by the small cultivators and by the new arrangement of the charges for the use of water of 1922, a reduction of 50 per cent. was made for *Schreibergärtner*.

During the war there was at times in Austria a very great scarcity of good seeds, the importation from other countries having practically ceased. The Government showed most commendable activity in encouraging seed production.

The provincial administrations took common action in distributing pamphlets and holding courses on the subject. With the object of meeting this temporary scarcity of seed, an agreement was concluded with Germany, Holland, Denmark and Bulgaria, intended to provide for the more urgent need. It was rightly felt that the small cultivators, even those who most inspired confidence, did not supply a guarantee of the entirely scientific employment of the seeds and rearing of the vegetable seedlings, and consequently several communal administrations entrusted such nursery work to the staff of their gardens, letting the small cultivators have the young plants either gratuitously or on payment of a small contribution to the expenses. In this way the best use of the precious seeds was ensured and the small cultivators obtained young plants of good quality.

To ensure the physical powers of resistance of the small cultivators, essential if they were to accomplish their rough work, they were allowed supplementary rations of bread (supplement for persons doing heavy work).

The kitchen gardens were managed in a thoroughly individual way, according to the taste and the knowledge of the owner, but above all in conformity with his needs and the productive capacity of the soil. Energetic *Schrebergärtner* could lift two and even three crops a year from the soil; others confined themselves to one crop. A large part of the area cultivated was given up to potatoes, the largest part to vegetables. Many who held the land on a long term agreement planted fruit-trees. Many built little huts, originally meant only for putting away tools. But it was often necessary to watch the gardens at night; in fact the small cultivators took it in turns to do so in the season of the ripening of the fruit and maturing of the vegetables, and for this reason and from the wish to live all the summer on their allotments, these huts were little by little enlarged and put into better order. Once such a tendency made its appearance, the desire for one's own house on one's own ground together with the ever increasing lack of accommodation led to a general movement towards taking up one's abode on the market gardens. This movement developed and gained considerable importance in Austria especially in the years succeeding the war, and has produced satisfactory results at the present time, more particularly in the environs of Vienna, though results small in comparison with the need.

The same movement is naturally, on many sides, closely connected with the schemes for agrarian reform and home colonisation (1), questions constantly discussed and examined during the war, particularly in the interests of the better employment of the disabled service men and widows. This led to the formation of a National Federation for Small Holdings for Families of ex-Service Men (*Reichsverband für Kriegerheimstätten*) (2), created 30 April 1916 by the initiative of the fourth Austrian Economic Conference (held from 5 to 7 February 1916).

The small cultivators could not of course derive benefit from the steps taken by the Government to maintain agriculture properly so-called in working order, with the exception of the measures designed to ensure the supply of seed potatoes, in which their needs were to some extent taken into account.

Excellent results usually followed from the steps taken by the local

(1) VOGEL: Die agrarstatistischen Grundlagen einer Innenkolonisation und Erhöhung der landwirtschaftlichen Produktion in Oesterreich nach dem Kriege, in *Statistische Monatschrift*, 1917. — VOGEL: Innenkolonisation und Landarbeiterfrage in Oesterreich nach dem Kriege. Berlin, 1918.

(2) SAGMEISTER: Kriegerheimstätten. Vienna, 1916. — RIEDL: Kriegsinvalidenansiedlung, in *Arbeitsnachweis*, 1918, p. 59. — MARSHNER: Fürsorge für Kriegsbeschädigte in Böhmen, Prague, 1916. — KALLBRUNNER: Measures taken during the War to Maintain the Supply of Agricultural Labour. *International Review of Agricultural Economics*, No. 3-4, 1922.

authorities. These bodies made available many tracts of their own land either gratuitously or at very low rents, allowed the free use of water from the town pipes, and furnished watchmen to prevent as far as possible thefts from the gardens. The tracts belonging to the communes were always fenced and supplied with water-pipes. Street-sweepings, too, which contain much fertilizing matter, were collected and brought to the cultivators on payment of a small sum.

Disregarding superficial estimates, no trustworthy statistics are in existence on the number of the cultivators, the areas cultivated by them and the resulting production, except the figures compiled by the Ministry of Railways with regard to the railway employees. It is difficult to furnish trustworthy statistics, even limited to the chief points, among other reasons because it is not easy to distinguish the *Schrebergärten* from the domestic garden, which is today for the most part given up to the growing of vegetables in a much greater degree than before the war.

Various associations sprang up with the aim of giving information and promoting mutual aid amongst cultivators and poultry breeders. These were gradually transformed into societies on more formal lines and of wider scope and were finally united into large and powerful federations with branches, selling agencies, etc. According to a report of the Office for Market Gardens (the section of the Town Council of Vienna which concerned itself exclusively with market gardening), in the autumn of 1918, there were in existence about 90 associations, some united into the *Verband der Schrebergärtnervereine*, the others into the free union of associations of market-gardeners. Later on these organizations combined. The federations published journals, or utilized as their own organs periodicals that already had been in existence some time (1). They organized besides, for the most part with effective support from the public authorities, courses, conferences, exhibitions, excursions, experimental plots, etc.

§ 2. THE DEVELOPMENT OF SMALL MARKET GARDENS IN VARIOUS CITIES.

(a) *Vienna*. — Small market gardening was developed on the largest scale in Vienna, where nearly two millions of people had to be fed, while the provisioning zones of the city became more and more restricted in the course of the War (2).

(1) Among these journals may be mentioned: *Der Siedler*, organ of the "Verband der Schrebergärtnervereine" of Vienna; *Zentralblatt für Kleintierzucht und Gartenbau*, of Vienna; *Mein Sonntagsblatt*, of Neutitschein; *Der Kleintierhof*, of Innsbruck; *Die illustrierte Tier und Gartennacht*, of Prague; *Die illustrierten Blätter für Kleintierzucht*; *Zeitschrift für den Obst- und Gartenbau*.

(2) The supply zones of Vienna, in time of peace, stretched across the frontiers. First from the blockade, then by the closing of the Hungarian frontiers, and subsequently of the different provinces of the Empire, Vienna had at last to have exclusive recourse for provisioning to Lower Austria, a zone already densely populated and not very productive.

The land used for making the gardens stretched round the city, and was estimated by the director of the Vienna Office for Market Gardens, in 1920, at 17 millions square metres in round figures. The number of families which profited from these plots is calculated at 50,000, the number of persons taking part in the gathering of the produce at about a quarter of a million.

The organization of the market gardens originated in a very modest way. On an area of about one and a quarter hectares, the *Naturheilverein* in 1903 began under Bromold to make market gardens in Purkersdorf and a year after to build huts. In 1911 the first market gardens in the immediate neighbourhood of the city were made in Rosenthal, in the 13th communal district, where today there are in round numbers 5,000 fruit trees and 12,000 fruit bushes producing on an average 100,000 kilos of stone fruit and from 60,000 to 70,000 kilos of hush fruits. In 1915 the municipality of Vienna allotted land for 3,000 market gardens. At the same time the Ministry of Instruction took steps to introduce war kitchen gardens for schools, which were intended not only for the production of articles of food, but were also to serve as centres of instruction and education, and as providing a resource for boys left without any one to look after them.

In 1908 there were already in Vienna 23 principal colonies with 3,200 larger gardens and 4,500 smaller, not to speak of many other ones scattered here and there.

The production of the *Schreibergärten* of Vienna is estimated by Siller at 150 trucks in round figures of vegetables and potatoes for 1915, and for 1920 at 4,500 trucks with a value of 135 million kronen (1). He calculates the returns from the breeding of animals at 200,000 fowls, 12,000,000 eggs, 250,000 rabbits, 5,000 goats and 750,000 litres of milk. These quantities, though far from meeting all the needs of a city of two million inhabitants, are nevertheless capable of exercising a very marked influence on the provisioning of the population, and on the fixing of prices, since it has been proved that in cities where the market gardening movement has had less development, other circumstances being equal, prices of vegetables are higher.

The efforts of the civic authorities under the direction of the burgo-master, Dr. Weiskichner, were on a large scale and were attended by success. As early as the summer of 1914, arising out of the vote on housing measures, a detailed programme was formulated and carried out, of course with the alterations that had become necessary. A department was created in the municipal administration which made available for the purpose greenhouses and gardens belonging to the city. For very small rents pieces of land, water, implements, street-sweepings were to be had; fences were made and water pipes, artificial manures, plants and seeds were allotted either gratuitously or at cost price; the police were instructed to

(1) See SILLER: Kleingartenbau, in *Ernährungskunde*. Vienna, 1921, and SILLER: Wiener Schreibergärten. Vienna, 1922.

do all in their power to preserve the market gardens from thefts. For the encouragement and mutual instruction of the cultivators, but also with the aim of demonstrating the importance of the movement to all citizens, exhibitions were arranged, at first on a modest scale, then, beginning from 1919, annually on a large scale in the town hall.

Other public bodies supported the movement. Thus the military authorities granted part of the drilling grounds, and the Imperial Household granted extensive lands belonging to the Crown. Besides, institutions of public utility and even various private institutions did their best to help the movement on, having the interest of the workers at heart. Among others there deserve mention the Emperor Francis Joseph Jubilee Foundation for Workers' Dwellings and for Vienna Welfare Schemes (*Kaiser Franz Josefs Jubiläums-Stiftung für Volkswohnungen und Wohlfahrtseinrichtungen in Wien*), maintained by support from the public funds, which as early as 1903 had set aside a large belt of land for market gardens and had increased it during the war; the Nussdorf Brewery (*Nussdorfer Bierbrauerei*), the Institution for Insurance against Workmen's Accidents in Lower Austria (*Arbeiterunfallversicherungs-Anstalt für N. Ö.*). Some army divisions made vegetable gardens in the barracks and on the drilling grounds (1). Naturally all the gardens had an incomplete and provisional character. The fences and huts had a primitive appearance, which however improved as years went on. The parts where fruit trees have been planted make a very pleasing impression today.

In other cities there was a development similar to that in Vienna, but naturally on a much smaller scale. The extent of the development depended largely on the greater or less needs of the population, and these in turn depended on the productiveness of the surrounding country, and also on local circumstances.

(b) *Brunn*. — The municipal authorities of Brunn did much to encourage the movement in favour of market gardens (2), but since the supply of vegetables in the city was always relatively adequate there were no results proportionate to their endeavours. Thus for example on a deserted cemetery, 2,5454 hectares in extent, the municipality laid out 74 gardens, fenced and with water laid on in such a way that to every four gardens there was a standpipe. It is worth mention that the greater number of the cemetery trees were preserved and that there was in the scheme some consideration for the beauty of the countryside.

Another site was put into order on a rubbish dump, all the work of laying it out being undertaken by the town gardeners; 86 allotments were here made out of an area of 2.2618 hectares, and these were for the

(1) An interesting scheme was projected in 1915 by Professor Bauer, designed to make use of the heat contained in the condensation water of the large electric works of the city of Vienna, producing 150,000 horse power, by making the water flow through a system of pipes to the market gardens, so as to bring the plants on, especially in the colder seasons. But on account of the expense involved, it was not possible to carry it out even on an experimental scale.

(2) KRONFELD: *Zur Geschichte der Schrebergärten*, in *Österreichische Gartenszeitung*, Vol. 17, No. 4, 1912.

most part given to town workmen (1). Single fields and plots of land were also granted to workmens' associations which distributed them amongst their own members. For the most part no rent was payable for the first years of holding, as a counterbalance to the labour necessary for bringing it under cultivation.

In a sense the school vegetable gardens are instances of the same movement. These were instituted at the primary schools by the public authority for the first time in 1917, and after the war they made great progress and were of immense educational value to the scholars.

The committees in charge of the bread tickets (the coupons that is to say, that came from the authority controlling the bread rations) issued tickets for the purchase of fodder at low rates, bran, maize, barley, of-fals, etc. to owners of small live stock. The issue took place at the municipal slaughter-house.

The applications for small gardens were, however, relatively very few. Indeed some of the plots offered by certain philanthropic business men, for example by the proprietor of the Löw-Beer Spinning Mills, were not taken up at all, although they were to be handed over ready manured and ploughed.

(c) *Graz*. — In Graz, with 159,000 inhabitants in 1916, *Heimgärten* were, according to a pamphlet by Professor Pfeiffer, instituted in 1907, thus forming the basis of a very excellent movement in the direction of small market gardens. Persons belonging to every profession, particularly, as happens everywhere, workmen and members of the middle classes, cultivated large areas subdivided into lots of 100 to 200 square metres, put at their disposal by the municipality, the State, ecclesiastical bodies, and also by business men and private landed proprietors. The area of the small market gardens was :

Before the war	20,500 square metres.
In 1917.	357,710 "
In 1919	813,449 "
In 1922	1,054,765 "

The number of lots laid out in vegetables was :

Before the war	75
In 1917.	2,833
In 1919.	6,993
In 1921.	7,135

Land for making market gardens was given as follows :

The State.	39,000 square metres
The municipality of Graz	446,563 "
Churches, convents, etc.	47,383 "
Manufacturers, etc.	185,730 "
Private landowners	325,222 "

(1) These data and those relating to other towns were obtained by means of a questionnaire prepared for the purpose by the present writer.

Deserted plots of land, building land, etc. supplied 10,838 square metres.

(d) *Other towns.* — *Innsbruck*, which in 1916 had a population of 60,000 in round numbers, reckons a market garden area of about 340,000 square metres which in the years from 1917 to 1919 was distributed in lots of from 200 to 400 square metres, and later, as the number of small cultivators kept increasing, in lots of only 100 to 200 square metres.

Wiener Neustadt, with about 35,000 inhabitants, has 150,000 square metres of market gardens, of which one third has been given by two large business firms and two thirds by the municipality. This extreme development of small cultivation has had a particularly favourable influence on the market, the more noteworthy as the surrounding country is not productive.

In *Liesing*, with 8,800 inhabitants, there are about 100,000 square metres utilized by small cultivators, in *Krems* with 130,000 inhabitants also about 100,000 square metres, in *St. Pölten* with 26,000 inhabitants, nearly 380,000 square metres.

The municipal authorities one and all report that the people are far from having as much land as they want, and they are continually taking up fresh spaces. All remark the valuable effect on the town provisioning, which it greatly facilitates; they state that the style of living of the workers has noticeably improved; they draw attention to the beneficial effects on family life and also to the increased income of those concerned who, in addition to their regular occupation, are engaging in an activity of great economic value. They further state that the small cultivators everywhere give up going to the public houses; they are often induced to attend lectures, courses, etc., of an instructive kind; they read technical journals and even make experiments in crops and new plants.

It should be mentioned that, especially among the Vienna *Schreibergärtner*, attempts to grow medicinal plants and to sell them in common are spreading, naturally with the encouragement of public bodies. Among the small cultivators of Upper Austria the tendency is often observed to try the Chinese methods for growing grain and to introduce them on a large scale.

§ 3. SMALL MARKET GARDENS OUTSIDE THE TOWNS.

In the country the passing of the landless labourer into the class of those who grow their own food in part at least has come about for the most part in a very simple way: he has rented a piece of land from a farmer who, from circumstances arising out of the war, is not in a position to cultivate the whole of his land. In many cases the local authority found itself in the fortunate position of being able to let a large extent of plots of land to landless labourers: in other cases this could be done by a factory which in previous years had acquired land in view

of a future extension. It often happened that buildings near water-falls taking the place of former mills possessed large stretches of land which up to now had been let to some peasant.

Plots of land could thus be had quite easily, in contrast to what happened with the *Schreibergärten*, since the local authorities knew that by far the best way to satisfy the urgent demands of half-starved labourers was to give them land, and because they could in that way prove to the Government, who looked askance at uncultivated land (1), that everything possible was being done to utilize the soil to the full.

Matters were greatly helped by the fact that hands employed in the ordinary rural businesses, and often their wives too, belonged to peasant families and by long residence in the country were in close touch with agriculture, so that they were in a position to manage the lands leased to them with skill and success; besides their houses are generally close to the fields, and often have fittings rendering the management of a small farm an easy matter. The country workman's plot is just like that of the peasant, while the town worker's plot is more like that of the professional gardener.

Small vegetable plots of from 2,500 to 6,000 square metres sprang up in nearly all rural parishes, especially where the surrounding country was not productive and where the economic conditions for such undertakings existed. No statistical returns were made of the number or extent of the plots so leased, except in the case of those granted by the Ministry of Railways to its employees. We shall go more fully into the question of these later on.

It should be said that along with the taking up of these plots there went the breeding of small animals, especially goats, rabbits and fowls, often pigs also (2). Special provisions in respect of these were rarely made, being unnecessary, as there was always a supply of breeding animals in the neighbouring peasants' plots, available also for the small holders. These as a rule profited by the measures taken by the Government in the interests of agriculture proper, for example by the seed supplies.

Unfortunately there was during the war no legislative provision securing the continuous and regular use of these plots, under the form of a proper letting agreement; thus the tenant was often very uncertain of the terms and the duration of the contractual relation, and for that reason neglected to make improvements or to manure properly. But the impossibility of utilizing the land in any other way had the effect of stabilizing the relationship. The rights on either side were defined, on the whole on the lines of not allowing a repudiation of the

(1) By a Decree of the Ministry of Agriculture of 15 February 1915 published in the *Reichsgesetzblatt*, No. 38, every landowner was obliged to cultivate all the land belonging to him. If this was impossible, the local authority was to take steps to do so.

(2) According to *Wirtschaftsstatistische Materialien über Deutsche-Oesterreich* (Vienna 1919), there were in Lower Austria in December 1910 94,500 goats and in October 1918, 142,000 goats; this latter number must now be greatly increased.

contract, by the Regulation for the Protection of Small Tenants (*Pächterschutzverordnung*) of 18 December 1919 (1), reinforced by that of 18 July 1921 (2).

In conclusion, it may be said of this type of small vegetable garden that it represents an intensive cultivation of the soil over a very considerable area, and that it materially assisted to maintain the level of the food supply, and to preserve the peace of mind of the labourers concerned, in difficult circumstances. It is worth remark that the workmen proved for themselves the needs and difficulties of agriculture, a fact which contributed not a little to the maintenance of the understanding between producers and consumers.

§ 4. UTILIZATION OF LANDS BY EMPLOYEES OF THE STATE RAILWAYS.

Among the employers of labour who, as has already been said, gave commendable encouragement of all kinds to the organization of market gardens, special mention must be made of the Ministry of Railways and all the railway authorities, who apply themselves systematically and with success to make life more endurable for their workmen and employees through the medium of kitchen gardens. In some measure, more favourable conditions exist for the utilization of the land by railway employees than by other groups of industrial workers. In time of peace, a number of railway men, especially watchers of the line, had carried on agriculture on small allotments near the railway, and had pastured their cattle on grass from the railway banks. Provisions and circulars of the Ministry of Railways urged on other railway men the possibility of learning to bring under cultivation further plots belonging to the railways, used only in part or temporarily as dumping grounds, or which had been bought in view of future extensions. Near the branch lines, there were small places available and capable of being utilized for farming. During the war the agricultural activities of the railway men was much curtailed by exceptional demands for compulsory overtime work.

Of importance were the instructions of the Minister of Railways, Forster, laying down that all plots of land within the administrative area in any way available were to be devoted to the creation of railway market gardens (3). On the whole the railway administration did not interfere in the guise of an employer or producer, but only by way of encouragement to the efforts of individual employees. Thus when there was no land of their own available, lands belonging to outsiders were leased on long term agreements. The first ploughing of soil previously untilled was provided for, as well as the laying on of water and making of fences, and manures were brought from the stations for disinfection of the trucks.

(1) Published in the *Staatsgesetzblatt*, No. 589.

(2) Published in the *Bundesgesetzblatt*, No. 398.

(3) HELMER: *Die Kleingartenbewegung des österreichischen Staatseisenbahnverwaltungs im Kriege*, in the fourth part of the *Österreichische Garteneiwartung*, 1918.

At the beginning of the war 1,500 hectares in round numbers were cultivated by about 20,000 men in all Austria (excluding Galicia and Bukowina). From 1915 to 1917 about 513 hectares of fresh land was brought under cultivation and 60 hectares were taken on lease, so that another 18,000 railway men received market gardens of from 180 to 250 square metres in extent. From one to two *Heller* the square metre was paid in rent, while for lands not belonging to the railways five *Heller* was paid. Many railway men have of course rented land on their own account directly from third parties.

With the aim of promoting the growing of vegetables, special measures were taken, on similar lines to those followed by a large number of the local authorities, especially in procuring seeds and seedlings. As a pattern and example, there was the model vegetable garden, of nearly 3,000 square metres in extent, created at Leitmeritz by Herr Hromatka, an engineer, in which special attention was paid to bush fruits. Similar plans were made or attempted by other railway directorates.

To reward the efforts of individual small cultivators, to spur on others and to give a valuable demonstration to all, an exhibition was held of the produce of the Vienna small cultivators belonging to the railways, with very satisfactory results.

It should be mentioned that the movement for market gardens spread after the war among the railway men of the new Austria, and its growing success found its best proof in the exhibition held at Linz in September 1921 (1).

Along with the market gardening the railwaymen naturally carried on the breeding of small stock, and in this respect also they could benefit by the encouragement given by the railway directorates. Especially noteworthy are the attempts to transform into fish-ponds the ditches running the length of the railway banks, made by excavations, etc. These could not be used for agriculture on account of the frequent or regularly occurring floods. The Linz railway directorate put into order seven ponds for carp and four for trout.

Beekeeping was systematically encouraged, and pig-breeding by means of the setting up of service stations whence boars were obtained.

Many railwaymen possessed milk producing animals, often cows but usually goats: here and there sheep too where there was pasture ground in the woods and in the cuttings.

5. FARMS ATTACHED TO INDUSTRIAL UNDERTAKINGS.

While the small cultivators directly take up the plots and bear the whole risk of their activity, the *Industriegüter* (farms attached to industrial undertakings) must be considered as the schemes of employers,

(1) DIE KLEINWIRTSCHAFT DER ÖSTERREICHISCHEN EISENBAHNEN AUF DER AUSSTELLUNG IN LINZ VOM 3. BIS ZUM 5. SEPTEMBER 1921. Linz, 1921. (The publication also served as a catalogue of the exhibition).

who are aiming at producing food stuffs on a large scale, so as to put them at the disposal of their workmen and employees.

Attempts have been made in different places, without much real success, to draw away workers from industry to farm-work, at least temporarily, partly in consideration of the shortage of labour in agriculture, partly from hygienic reasons (1).

The lands farmed by the business firms are for the most part devoted to the intensive production of milk, thus making impossible the attainment of a financial result, given the high cost of production and the low selling prices. In the second place the aim is the production of pulse, then of fodder for the small stock of those attached to the farm. Cultivation of cereals, fattening of live stock and fruit growing took no important position. In fact as a rule products of this kind do not meet with the approval of the persons who are in charge of the distribution of the produce of these farm undertakings, seeing that the sharing out of quantities usually very small among a large number of claimants presents serious difficulties.

Out of the large number of the *Industriegüter*, we may mention the following, as they were created by funds from the State budget because intended for State employees: the Trautmannsdorf Farm, which is rented and managed by the Central Federation of Provision Warehouses for the Staff of the Austrian Transport Bodies (*Zentralverband der Lebensmittelmagazine für Bedienstete der österreichischen Verkehrsanstalten*); the Sussenbrunn Farm, where the Directors of the Vienna North-eastern Railway maintained 70 cattle; the Sonnenleiten Farm and the Goat Farm in Gross Ramming (Upper Austria), managed by the Linz Railway Directors; the Government Offices' Farm at Fischamend, where 21 dairy cows are kept.

Besides these there were during the war farms leased in order to supply provisions for hospitals, refugee camps, etc.; these were managed by various Government officials.

Many municipal authorities, too, bought farms, as for example that of Vienna, and similarly various business firms, such as the Daimler works at Wiener-Neustadt, the Bohler works at Sollenau, etc.

But speaking generally, these *Industriegüter* have never attained any striking economic importance, nor was it likely they should in view of their limited extent and the large number of persons sharing in the produce. Seeing that the workmen do not set much store by the produce, and that meanwhile the farms lie idle, in the greater number of cases there is a tendency to give up these lands and to make them available for market garden and home colonization schemes. The fact is worth noting that the city of Vienna, a little while after the end of the war, again let the lands bought during that time.

(1) KELLER: Beurteilung von Industriearbeitern zur Beschäftigung in Landwirtschaftlichen Betrieben unter Mitwirkung der sozialen Versicherungsanstalten. Ein Vorbeugungs- und Volkshilfsmittel gegen Nervenkrankheiten. Leipzig, 1905

Owing to the market garden movement, the working classes were enabled to maintain life at a level at least tolerable during the war, and to gain advantages which they will only be able to realize later on, when all the new gardens are cultivated, and supplied with fruit-trees in bearing.

The market gardens, which had spread chiefly in the territory of the present Republic of Austria, the part of former Austria which suffered most, have continued their existence since the war, in fact have experienced a rapid development, a fact that is to be explained on the one hand by the continued shortage of food stuffs, on the other by the fact that now that the initial work of bringing the soil under cultivation is accomplished and the *Schreibergärtner* have accumulated experience, the yields are increasingly satisfactory (1).

It must be borne in mind that the market gardening has not only contributed in a remarkable degree to provide the gardeners with vegetables of all sorts and so to reduce the demands on the produce of professional and peasant vegetable growers, thus helping to keep prices low (2), but it is of the greatest importance to the cultivators from the point of view of health. Work in the market gardens — as has been confirmed by a wide enquiry made among all the principal local administrations — has exercised a valuable influence on the moral and economic development of the people.

(1) According to a report of the Town Council of February 1922, the yield obtained by the market gardeners of Vienna is estimated at 1,300 million *Kronen*, being an index of the great economic importance of the movement and of the good will of the people of Vienna who passed a large fraction of their spare time in market gardens creating new values all the time.

(2) The prices of vegetables are always lower in large centres with a well developed system of vegetable gardens, than in places close by, with less area devoted to small vegetable gardens and with a more productive surrounding country.

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Co-operation and Association

AUSTRIA.

AGRICULTURAL CO-OPERATION DURING THE WAR

by Dr. HERMANN KALLBRUNNER.

§ I. THE AGRICULTURAL CO-OPERATIVE SOCIETIES BEFORE THE WAR.

When the war broke out in August 1914, there was in existence in Austria a far-reaching net-work of co-operative societies of all kinds which were on the way to successful development, thanks, among other causes, to the vigorous and varied efforts of the administrative departments of the State and of the separate provinces.

According to the returns made by the Central Statistical Commission, on 1 January 1914 there were in existence 19,091 registered co-operative societies (1) distributed among the different regions as is shown in Table I. So as to compare the development of co-operation in the different regions with the number of inhabitants, and also the number of the agricultural co-operative societies with the agricultural population, we give (in column 3) the population at the time, and (in column 7) the number of persons who declared as their profession agriculture, silviculture and kindred occupations (2).

Of these co-operative societies 9,904 were on the basis of limited liability, 3,408 of them being purely agricultural; the others were on the basis of unlimited liability. Twenty one of the 99 co-operative federations were associations, but the majority were registered co-operative societies.

Of the co-operative societies 34.7 per cent. were German, 28.2 per cent. were Czech, 15.5 per cent. were Polish, 8.1 per cent. Ruthenian, 5.1 per cent. Slovak, 4.8 per cent. Italian, 2.5 per cent. Serb-croatian, and 1.1 per cent. Roumanian.

(1) *Oesterreichische Genossenschaftspress*, No. 255, of 9 July 1914.

(2) *OESTERREICHISCHES STATISTISCHES HANDBUCH*, Vienna, 1918. Pages 5 and 12.

TABLE I. — *Development of Co-operation according to the Number of Inhabitants and the Agricultural Population.*

Regions	Co-operative societies registered	Population at time	Co-operative credit societies	Railway banks included in (4)	Other co-operative agricultural societies	Agricultural population	Number of federations
1	2	3	4	5	6	7	8
Vienna	352	3,531,814	144	—	5	635,086	12
Lower Austria (excluding Vienna)	1,256				485		—
Upper Austria . .	432	853,006	652	557	77	399,791	3
Salzburg	103	214,737	64	57	13	85,993	1
Styria	856	1,444,157	551	431	181	767,609	7
Carinthia	292	396,200	219	180	43	202,288	2
Carniola	444	525,995	227	189	177	326,035	4
Trieste	104	229,510	34	4	11	9,313	—
Görz	233	260,721	119	104	79	154,916	3
Istria	249	403,566	132	113	76	247,240	2
Tyrol	1,116	946,613	502	476	490	513,591	7
Vorarlberg	209	145,408	83	78	51	46,018	2
Bohemia	5,005	6,769,548	3,307	2,586	575	2,186,043	9
Moravia	2,424	2,622,271	1,379	869	446	1,082,381	7
Silesia	631	756,949	393	320	63	220,865	4
Galicia	4,231	8,025,675	3,303	1,494	576	5,863,044	23
Bukovina	752	800,098	581	472	85	569,238	8
Dalmatia	402	645,666	260	216	78	533,256	5
Total	19,091	28,571,934	12,240	8,406	3,511	13,842,707	99

The following figures give an idea of the successive development of co-operation in Austria (1):

(1) For further details on Austrian agricultural co-operation, consult: STÖRK: Überblick über den Stand des landwirtschaftlichen Genossenschaftswesens in Österreich. Vienna, 1910. — MITTEILUNGEN AUS DER STATISTIK DER LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN IN ÖSTERREICH. 3 volumes. Vienna, 1910-13. — JAHRESBERICHTE DES ALLGEMEINEN VERBANDES LANDWIRTSCHAFTLICHER GENOSSENSCHAFTEN IN ÖSTERREICH. Vienna, 1910 et seq. — *Oesterreichische landwirtschaftliche Genossenschaftspresse*, Vienna, 1904 et seq. — NEUDÖRFER: Der Entwurf eines neuen Genossenschaftsgesetzes und die Entwicklung des österreichischen Genossenschaftswesens. Vienna, 1913. — NEUDÖRFER: Grundlagen des Genossenschaftswesens. Vienna 1921. — HATTINGBERG: Das Österreichische Entschuldungsprogramm, Vienna, 1910. — FÜRER: Das landwirtschaftliche Genossenschaftswesen in Österreich. Vienna, 1912. — KERBLER: Das landwirtschaftliche Genossenschaftswesen in Oberösterreich. Linz, 1903. — RICHTER: Das landwirtschaftliche Vereins- und Genossenschaftswesen, from: GESCHICHTE DER ÖSTERREICHISCHEN LAND- UND FORSTWIRTSCHAFT. Vienna, 1902. — AGFAR-KOMPASS, JAHR- UND ADRESSBUCH DER ÖSTERR. LANDWIRTSCHAFT. Vienna, 1915.

Years	Number of co-operative societies
1873	169
1880	1,155
1890	1,898
1900	7,502
1910	16,469
1914	19,091

The year 1873 may be regarded as that which saw the beginning in Austria of co-operation regulated by law, organized on a uniform basis, and systematically promoted by the State. In that year the law on co-operative societies in Austria appeared (Gesetz vom Jahre 1873, über die Erwerbs- und Wirtschaftsgenossenschaften in Oesterreich, *Reichsgesetzblatt*, No. 70), which has not failed to have a beneficial effect on the movement.

§ 2. THE CO-OPERATIVE SOCIETIES DURING THE WAR.

On the declaration of War, all subsidies were at once withdrawn from the co-operative societies. By the decree of 2 August 1914, the Ministry of Agriculture stated that it would be possible to grant subventions only in cases of extreme urgency, and that co-operative societies must take measures to maintain themselves out of their own funds. Those of the managing staff who were liable for military service were called up, without any regard to the possibility of replacing them (1). The courses conducted before the War for the training of employees for co-operative societies (2) were no longer held: all the projects (3) in the interest of the development of co-operation were abandoned. It happened besides that the general conditions became less and less favourable to the growth of co-operative organizations, and that there came to be a shortage of all the articles to which the activity of co-operative societies could be applied. Thus the requisitioning of cereals deprived the co-operative warehouses of the chance of operating, while the demand for large consignments of cattle to be delivered to the military authorities similarly affected the co-operative societies for the sale of live stock (4). The enemy invasions in Galicia, in Bukovina and in Görz were prejudicial to the co-operative organizations

(1) From the beginning of the War only persons engaged in the business of supplying cereals to the army were exempted from military service.

(2) The last course was held from 15 January to 30 April 1914: it was attended by 27 persons.

(3) The third co-operative congress which was to have been held at Prague from 12 to 14 September 1914 was hastily postponed after the outbreak of war.

(4) See: KALLBRUNNER: Measures adopted by the Austrian Government for the Encouragement of Agriculture during the War (1914 to 1918), in the *International Review of Agricultural Economics*, Nos. 11 and 12, 1921.

of those regions; the war in the Adriatic rendered co-operative fishing practically impossible, an enterprise that had attained success by means of remarkable efforts. Some forms of co-operation nevertheless undoubtedly reaped advantage from the war, as for example the co-operative sale of resin which was able to take advantage with immense profit of the circumstances arising in war-time.

Co-operative societies for potato-drying sprang up for the first time; but they had only a brief prosperity and the shortage of fuel prevented their development. Except for this kind of society, the Government took no steps during the War to promote co-operation directly. In co-operative circles resentment was often felt at the influence of indirect measures, which by no means always led to the results hoped for.

The Central Statistical Commission registered on 1 January 1918 (the date on which the last statistics of Austrian co-operation were taken), 19,650 co-operative societies, that is to say 595 more than on 1 January 1914; but this result depends on the fact that new societies have been added, while no subtraction has been made from the total of the many societies of whose dissolution no information has been received (1). It is symptomatic of the state of affairs that the publication of the periodical *Oesterreichische landwirtschaftliche Genossenschaftspresse* was suspended at the end of 1917, and that the General Federation of Agricultural Co-operative Societies (*Verband der landwirtschaftlichen Genossenschaften*) went into liquidation immediately after the fall of the Empire.

We will now pass on to the examination of the working of the different forms of agricultural co-operation during the War.

§ 3. THE CO-OPERATIVE CREDIT SOCIETIES.

The most numerous and most important co-operative societies in Austria have always been the credit societies, organized almost exclusively on the Raffeisen system, and of great value as banks for the granting of credit for working expenses on short term and as savings banks for small deposits. They were protected against the danger of excessive demands for repayment by the moratorium issued immediately after the outbreak of war, for the express purpose of preventing hurried withdrawals from credit institutions. It is true that on the other hand the moratorium and the resulting impossibility of making free use of credits properly belonging to one, greatly shook the faith in the banks on the part of wide sections of the rural classes.

The desire to be able to make free use of one's own substance often weakened the sense for saving, and led to large hoards which in their turn brought about a noticeable lack of ready money.

The Ordinance of 31 July 1914, contained in the *Reichsgesetzblatt*, No. 193, directed a fortnight's postponement in the payment of all private debts, except those of an amount less than 200 kronen, and those connected with payment of wages, rents, etc.

(1) See: OESTERREICHISCHES STATISTISCHES HANDBUCH. Vienna, 1918, p. 152.

At the same time the Minister of Agriculture published a proclamation to the nation, intended to reassure savings bank depositors as to the safety of their deposits, and to put a check on large and unnecessary withdrawals. By the Ordinance of 14 August 1914, contained in the *Reichsgesetzblatt*, No. 216, the moratorium was prolonged till 30 September 1914, but the amount of the withdrawals allowed was graded according to the character of the credit institutions. From the Raffeisen banks only sums up to 50 kronen could be withdrawn, from banks with limited liability up to three per cent. of the credits with a maximum of 400 kronen, and from other institutions up to 2 per cent. of the credits with a maximum of 200 kronen.

The third ordinance on the moratorium reproduced in the *Reichsgesetzblatt*, No. 261, prolonged the limit for the repayments up to 30 November 1914: and the fourth dated 25 November 1914 contained in the *Reichsgesetzblatt*, No. 321, up to 31 January 1915.

The *Genossenschaftspresse* of 15 October 1914, No. 272, justly remarks in an article summarizing the co-operative situation, that there were no signs of panic in the Raffeisen banks, that the sums withdrawn were within normal limits, and that especially in regions where good profits were realized by the sale of cereals, large deposits on the contrary were being made and debts repaid.

By the Ordinance of 25 January 1915, contained in the *Reichsgesetzblatt*, No. 18, the limits for the payment of debts in Austria (excluding Galicia and Bukovina, where special provisions were issued on account of the circumstances of the War) were still further prolonged, that is to say to the months of February 1915 or May according to the original date of expiry. Credits becoming due from November 1914 to January 1915, on the basis of the sixth ordinance on the moratorium dated 25 May 1915 (*Reichsgesetzblatt*, No. 138), were made payable from June to August 1915. By this ordinance the normal situation was restored in the western States of Austria, not directly affected by the War. This came about after the issue of a number of other ordinances on the subject: ordinances however of minor importance and dealing only with details. The right of granting a prolongation up to 31 December 1915 in cases deserving of special consideration was left to the tribunals (1). In the territories of Galicia and of Bukovina, for the most part seriously affected by the war, the moratorium was again prolonged for 1916 by an ordinance of 22 December 1915 (*Reichsgesetzblatt*, No. 385), and for the first six months of 1917, and in certain cases deserving special consideration for the whole of 1917, by the ordinance of 28 December 1916 (*Reichsgesetzblatt*, No. 422).

Since there was a danger that from the continuance of the moratorium, and the stoppage of deposits, the credit organizations would not be in a position to meet even the reduced applications for money on the part of their members, the Government took care that the needs of the co-operative societies should be met by means of large discounts and credits

(1) Ordinance of 22 December 1916, in *Reichsgesetzblatt*, No. 384.

on the pledge given by the post-office savings banks and the Bank of Austria-Hungary.

In order to make it possible to furnish credit to firms that found themselves in difficulties owing to lack of ready money, the War Loan Bank (*Kriegsdarlehenskasse*) was opened in Vienna by the Ordinance of 19 September 1914 (*Reichsgesetzblatt*, No. 248). Representatives of agricultural co-operation took part in its administration. They did their best to procure credit for these organizations in so far as it was necessary. Although the bank which dominates Austrian finance, the Bank of Austria-Hungary, Vienna, had on 3 August 1914 raised the discount rate to 8 per cent., and the rate on loans of other kinds to 9 per cent., and although this was naturally not without effect on the Raiffeisen banks, the progress of these banks in the first year of the War was not unfavourable. On the other hand the profits on the sales of the different agricultural products put the members in a position to make deposits more freely and to repay debts. In these circumstances it was also to be expected that the discontinuance of the moratorium in August 1915 would be without prejudicial effects. The prosperity of the co-operative societies was evidenced also by the large subscriptions to the war loans, made by members through the societies. According to a communication from the General Federation that appeared in the *Oesterreichische landwirtschaftliche Genossenschaftspresse* there were subscribed through the medium of the co-operative societies:

31,183,303	kronen	in the	first	war loan
49,713,089	"	"	second	"
100,585,207	"	"	third	"
154,929,326	"	"	fourth	"

These by no means negligible subscriptions would never have come about if the Government had not issued special provisions on the matter. Thus, for example it was provided that loans and mortgages might be taken up without payment of tax if the sum thus obtained should be invested in war loan (Ordinance of 15 April 1916, *Reichsgesetzblatt*, No. 101). Steps were also taken to encourage the creation of co-operative societies and associations formed for the purpose of collective subscriptions to the war loans.

The circumstances of the credit organizations improved still more in the last years of the War, so that special provisions for their encouragement were not necessary, and the Report on the regulations issued by the Government on the occasion of the war (*Denkschrift über die von der Regierung aus Anlass des Krieges getroffenen Massnahmen*) could confine itself to stating briefly "that the situation has developed in a satisfactory way, so that the credit organizations have been able to furnish considerable sums in subscription to the fifth and sixth war loan (1)."

These subscriptions often came to such large sums that the co-operative societies found themselves without ready money, which created difficulties from time to time.

(1) Volume 14, page 16, July 1916 to June 1917. Vienna, 1917.

With regard to the development of the co-operative societies during the War, very instructive figures have been recently published in an extremely clear form by the Central Federation of German Agricultural Co-operative Societies in Bohemia (*Zentralverband der deutschen landwirtschaftlichen Genossenschaften in Böhmen*) for its own area (1), whereas the publications of the majority of the federations are either very incomplete or only handled with much difficulty, and several federations have suspended publication.

The number of the affiliated societies in this Federation increased during the War from eight to 694. The number of the members increased from 82,410 to 85,209. The total business done was

171 millions of kronen in 1913

170 " " 1914

261 " " 1915

331 " " 1916

424 " " 1917

501 " " 1918

500 " " 1919

The savings deposits amounted to

151 millions of kronen at the end of 1916

202 " " 1917

252 " " 1918

Loans were made from the banks to members for

22 millions of kronen in 1913

17 " " 1914

10 " " 1915

21 " " 1919

The co-operative societies deposited with the Central Federation:

14,673,758 kronen in 1913

13,357,878 " " 1914

39,034,004 " " 1915

56,605,179 " " 1916

79,368,322 " " 1917

127,467,256 " " 1918

(1) WEDEN (Dr.): Festschrift des Zentralverbandes der deutschen landwirtschaftlichen Genossenschaften Böhmens anlässlich der 25-jährigen Bestandesfeier: 1896 bis 1921. Prague 1921

Loans were made from the Central Federation to the co-operative societies to the amount of :

11,265,113	kronen	in 1913
9,449,307	»	» 1914
10,679,438	»	» 1915
11,653,884	»	» 1916
6,615,411	»	» 1917
4,262,940	»	» 1918

The decrease in the loans and the slow increase in the deposits in relation to the depreciation of the krone, are evidence of a temporary weakening of the interest in the co-operative societies. Nor can it be denied that these are always becoming burdened with heavier general expenses, without a corresponding increase in the development of business. But given the enormous rise of the prices of all kinds of necessities, it was not possible in the long run to keep the expenses of rents, management, remuneration of book-keeping staff, premiums for insurance against theft, at the same level as before. The burden of taxation also continued to increase.

Finally attention may be called to the Decree of the Minister of Finance, No. 26,996 of 1914, which provides that in view of the reduced numbers of auditors owing to the call to the colours, there might be an exceptional suspension of the obligation, as prescribed by law (1), for the biennial revision of the accounts of all co-operative societies.

The Ordinance of 9 August 1915 published in the *Reichsgesetzblatt*, No. 234, about the sale of forest and agricultural holdings, issued after long preliminary investigations (2), gives to the Raiffeisen banks and to the communes the right of precedence in the purchase of lands put up for sale and grants special powers subsequently widened by later regulations supplementing the ordinance. In actual fact, these measures have been successful in preventing the absorption of peasant holdings, and the acquisition of land by outsiders, more especially by speculators and war profiteers.

§ 4. CO-OPERATIVE WAREHOUSING SOCIETIES.

If we have just found that the economic importance of the Raiffeisen banks has diminished during the war from adverse circumstances, we can affirm exactly the opposite of the co-operative warehousing societies. These have increased in number and everywhere done a highly valuable work.

(1) On the basis of § 1 of the Law of 10 June 1903, published in the *Reichsgesetzblatt*, No. 138.

(2) See the scheme of the Austrian Council of Agriculture (*Oesterreichischer Landwirtschaftsrat*) of 1908, published in the *Oesterreichische Genossenschaftspress*, No. 109 of 3 June 1908; STORCK: *Massnahmen zur Bekämpfung der Guterschlachterei*. Vienna; KALEBRUNNER: *The Absorption of Peasant Holdings and Legislative Efforts to Counteract it*, in *International Review of Agricultural Economics*, No. 4, 1920.

In time of peace they took an active part in the supplies for the Commissariat of the army, a connection much valued by the co-operative societies in so far as the conditions of delivery and the prices were always exactly fixed and rigorously observed (1). In some regions the co-operative societies practically had the monopoly of supplying the military provision stores. It was thus natural that an attempt should be made to maintain these relations when war broke out. On 25 July 1914 the Minister of War sent a circular note to all the co-operative federations asking what grain they had at their disposal and were in a position to supply regularly. By the Ordinance of 10 August 1914, contained in the *Reichsgesetzblatt*, No. 191, the requisition of the stores actually in the warehouses was ordered with the object of preventing hoarding and the sale of cereals stored there at excessive prices. These requisitions had only scanty results; the greater part of the cereals were not yet threshed and much, especially in the colder regions, not even yet reaped. Hence, on 7 August 1914, the federations were instructed to buy breadstuff cereals and forage on the account of the Commissariat, in whatever quantity they could, and to keep it ready for immediate consignment. The delivery was not compulsory on the basis of the War Service law, but by free contract on prices fixed by the Ministry of War. These supplies came in large quantities. Thus the Federation of Co-operative Societies of Lower Austria furnished, up to the end of September 1914, 1,575 truck loads of cereals; the Czech Federation of Bohemia 1,557 truck loads of oats, hay and straw and 1,467 of cereals; the German Federation, 1,416 loads of cereals. The Czech Federation of Moravia contributed 2,700 truck loads of cereals, that of Silesia 12 truck loads of oats, that of Laibach 80 loads of hay, that of Bolzano 18 loads of hay and 28 of straw. This business would have become much larger, and its beginnings certainly gave promise of this in spite of adverse circumstances, if the prices offered by the Ministry of War had not remained lower than those offered by dealers, millers, or even by the military divisions buying on their own account. The consequence was that the members of the co-operative warehousing societies refused to continue to sell them their own produce. The situation was further aggravated by a serious shortage of bags, by the slowness of the process of payment, and by inadequate organization of the delivery of cereals sold.

The carrying out of these forced purchases was in the hands, as far as possible, of the co-operative warehousing societies, who were obliged to obtain cereals from non-members. As such operations are expressly forbidden by the law on co-operative societies and the partial exemption from taxation which the co-operative warehousing societies enjoy extends only to business with members, the taxes clearly had to be paid by the non-members.

On 21 February 1915 the requisitioning of all cereals was ordered, ordinary trade was suspended, and the War Institute for the Cereal Trade

(1) Every year the Ministry of War published instructions for the purchase of different kinds of provisions, minutely detailing the conditions of purchase.

(Kriegsgetreideverkehrsanstalt) was commissioned to collect, warehouse and grind all available stocks and to arrange for convenient distribution to the consumers. This Institute was created on the lines of the ordinance of 27 February 1915, reproduced in the *Reichsgesetzblatt*, No. 41 (1). The quantity of cereals to be delivered by each commune being laid down in accordance with the crop statistics, the collection was carried out by agents. The co-operative warehousing societies were utilized in this capacity, and to an increasing extent, since their numbers were growing all the time (2), their storage arrangements were very practical, and the expansion of business did not present any difficulties. Although the commissions paid to the warehouses for the work they did were very small (less than those of private agents) and although the co-operative societies had now to pay taxes like all other commercial undertakings, the accession of this business much increased their activity, and they were consequently able to pay their debts and to increase their reserve funds.

The quantities handled, although the yield per hectare of crops greatly diminished during the War (3), were considerable, and were not confined only to cereals, but included also hay, straw, beans, potatoes, etc., all products then under State control. The co-operative warehousing societies of Bohemia alone supplied

in 1915	19,800 loads of cereals		
» 1916	25,000	»	»
» 1917	15,600	»	»
» 1918	14,500	»	»

If the part taken by the co-operative societies in the delivery of cereals was much disliked by their members, they nevertheless were all the more in request for the purpose of the purchase of materials of all kinds. A particularly valuable impetus was given to the development of the co-operative warehousing societies by the fact that the Government made special use of them for the distribution of articles essential to agriculture and only available in very small quantities: a use to which they were well adapted by their arrangements for distribution and the convenient position of their warehouses. Thus in 1915 the General Austrian Society for Sale of Live-stock (*Allgemeine oesterreichische Viehverwertungsgesellschaft*) distributed,

(1) DIE KRIEGSGETREIDEVERKEHRSANSTALT. IHR AUFBAU UND IHR WIRKEN. BERICHT VIENNA, 1918; and DENKSCHRIFT ÜBER DIE VON DER REGIERUNG AUS ANLASS DES KRIEGES GETROFFENEN MASSNAHMEN. 4 volumes, Vienna, 1915-18.

(2) In Lower Austria the number rose gradually from 21 before the War to 42: in the German part of Bohemia from 14 to 36. In this latter, the number of members doubled, rising to 12,000, that of the shares trebled, rising to 1,130,000 crowns, and the reserves increased by nine times, rising to 3,723,000 crowns.

(3) According to the statistics published by the Minister of Agriculture the yield per hectare fell in Lower Austria from 16.9 quintals in 1913 to 8.4 quintals in 1918 for wheat, and from 16.3 to 8.4 quintals for rye.

by means of the co-operative warehouses large quantities of brown sugar denaturalized and consequently duty-free. Other cattle foods, such as brewers' grains, oil-cake, dried potato pulp, were equally put at the disposal of the Central Forage Office (*Futtermittelzentrale*) (1), which had to make the best possible distribution of the various foods, through the medium of the co-operative warehousing societies. In the same way were distributed the very small quantities existing in Austria of sulphate of copper, of seeds, of coal, of benzine for use in agricultural machines.

The following figures relate to the work accomplished in this respect by the German co-operative warehousing societies of Bohemia :

TABLE II. — *Articles distributed by the German Co-operative Warehousing Societies of Bohemia.*

Years	Fertilizers	Seeds	Coal	Fodder
1913	4,141	37	1,322	427
1914	3,575	70	1,018	406
1915	2,365	75	1,040	343
1916	3,074	93	648	1,043
1917	2,154	6	4,738	75
1918	2,215	34	57	26

The amount of the turn-over expressed in terms of money value increased in correspondence with the quantity of goods handled and was also affected by the rise in prices.

For the co-operative societies above mentioned, there are the following figures :

Year	Kronen	Year	Kronen
1910	102,518,841	1916	412,947,199
1911	120,103,626	1917	453,103,838
1912	134,579,591	1918	709,356,217
1913	122,825,236	1919	637,889,088
1914	135,511,247	1920	808,232,461
1915	334,660,657		

How valuable the work of the co-operative warehousing societies was to agriculture is shown by the fact constantly remarked that the yield of the lands was practically always at a higher level in districts where there were co-operative warehousing societies.

Mention should also be made of an institution which came into existence in German Moravia, of co-operative origin but apparently dissociated

(1) Created by the ordinance of 14 August 1915 (*Reichsgesetzblatt*), No. 238.

from the aims of co-operative organizations. We refer to the successful formation of warehousing societies, constituted on the basis of the Law of 6 March 1906 (*Reichsgesetzblatt*, No. 58) on limited liability companies. It was proposed to place the Raiffeisen banks and the other co-operative societies that had no distributive machinery or warehouses available, in a position to distribute the different Government consignments, and to collect the quantities of cereals, hay, and straw of which delivery was ordered. They had to take steps to amass these quantities by direct methods, apart from trade means: this could not be done without warehouses and without machinery for collecting. Guided by these considerations, and by a sense of the urgency of the matter, the Central Federation of the German Co-operative Societies of Moravia (*Zentralverband der deutschen Genossenschaften Mährens*), with the aid of the Government, drew up model rules and a draft scheme which a short time after were taken as the basis of their constitution by 14 societies.

The need of the distribution of 35 loads of sulphate of ammonia assigned by the Government to 600 communes, the simplicity of the constitution — the decision of the board or of the Vigilance Committee of a co-operative society or of the Council of the commune sufficed — the possibility of doing business on a large scale for non-members also, finally the effective propaganda of the speakers for Hilmer co-operation, brought it about that a large number of these societies were formed with a wide radius of action (1). That a real need was thus met appears from the fact that the capital invested in the 14 societies first constituted yielded an average interest of 7.92 per cent., and that it was possible through their medium to supply articles required to 126 communes, that is to say to rather more than one fifth of the 600 communes of German Moravia.

In the following years also this form of society originating from the co-operative societies and constituted on co-operative principles has continued to show excellent results, more especially by reason of the greater liberty of the managing bodies which also have the disposal of financial resources relatively much larger than usually happens with the ordinary co-operative societies in which for the most part a deficiency of capital makes itself felt, this being a consequence of the serious mistake generally made at the time of their constitution, in order to obtain members in large numbers.

§ 5. THE CO-OPERATIVE DAIRIES.

These co-operative societies, which before the war were very widely spread through Austria and took a very important share in the provisioning of the cities, suffered severely during the war. In fact, besides the difficulties of a general kind, such as want of trained staff, of coal, of cans, etc., two special circumstances combined to limit their working in a very marked degree. First of all the scarcity of milk, which in its turn depended on a variety of causes. The number of dairy cows diminished considerably,

(1) The warehouse in Moravian Neustadt in its first year handled 39,291 quintals of cereals.

as when the butchers' beasts properly so-called were all gone the milch cows were also sacrificed on a large scale. Feed became scanty and of inferior quality: concentrated foods almost completely disappeared and hay had to be delivered in large quantities to the military authorities. Finally the direct consumption on the part of the owner of cattle increased, since in the shortage of flour and meat, they consumed their own produce in a much larger measure than in time of peace. And undoubtedly a difference was also made by the less careful oversight of the cattle, and the decreased manuring and cultivation of the meadows and pastures.

In Lower Austria 345,964 cows were registered in 1900 and in 1918 only 254,019 with a decrease of 26.59 per cent. (1). The average daily yield of a cow was reckoned before the War at five litres, and as early as 1917 at only 3.5 litres. Hilmer (2) comparing the milk supplies of several co-operative societies before the war and in 1916, arrived at the following results:

(a) 1914	2,714,902 litres
1916	2,098,902 »
(b) 1914	515,278 »
1916	374,462 »

The quantities of milk supplied in 1916 were thus equal to 77 and 72 per cent. of those supplied in 1914.

For the same period the Graz Federation of Agricultural Co-operative Societies stated that the supplies had been reduced to 65 per cent. of the pre-war supply. The Scharding Central Co-operative Society for the Sale of Butter (Upper Austria) reported that the supplies in the same period had fallen to 42 per cent.

The other circumstance from which the co-operative dairies had to suffer during the War was the result of the measures by which the Government, with the aim of keeping the cost of living low for the bulk of the population, introduced maximum prices. These far from covered the cost of production and consequently on the one hand did away with all interest in production and on the other led to a clandestine trade where in order to obtain the goods higher prices were willingly paid.

An Ordinance of 1 August 1914 (3), containing regulations for the supply to the nation of the first necessities of life, put obstacles in the way of prices reaching their natural level. On more rigorous lines was the Ordinance of 24 March 1917 (4) directed against the artificial heightening of prices.

Since the co-operative societies could not pay other than the maximum official prices, many members withdrew from the organizations and

(1) WIRTSCHAFTSSTATISTISCHE MATERIALIEN ÜBER DEUTSCHÖSTERREICH. Vienna, 1919.

(2) Österreichische landwirtschaftliche Genossenschaftspresse, No. 339, 10 May 1917.

(3) Reichsgesetzblatt, No. 194.

(4) Reichsgesetzblatt, No. 131.

sold their produce to dealers and to consumers who took the goods straight from the farm.

Particularly prejudicial to the co-operative societies was the circumstance that in fixing the maximum prices not enough account was taken of the quality of the produce, so that the work necessary to turn out good stuff was not adequately rewarded. Only towards the end of the War were the more highly finished products paid at an adequately higher rate.

Although the co-operative societies sustained severe losses in consequence of these regulations, dictated as they were by the apparent interests of the consumers, they were nevertheless in the forefront in supplying the prescribed quantities of butter and milk to the receiving offices of the provisions required by the State, a fact which gave fresh proof of the importance of these organizations for town provisioning. According to Hülmer the districts in which co-operation was prevalent (e. g., those of Datschitz and of Moravian Budwitz) supplied from 115 to 120 per. cent. of the prescribed quantities, while districts without co-operative societies only yielded from 26 to 30 per cent.

A factor unfavourable to the working of the co-operative dairies was the increase in the general expenses, doubly noticeable from the decrease in the amount of milk handled. The rate of the general expenses of the German co-operative dairies in 1914 was 1.62 *Heller* per litre of milk; and in 1919 10.62 *Heller* per litre (The quantity of milk handled fell in the interval from 20,008 to 12,586 litres a day).

The following measures have still to be mentioned: the Decree of 14 August 1914, which laid down the general lines for the maintenance of dairy businesses during the war, named the General Federation of Agricultural Co-operative Societies in Vienna as medium for the sale of produce and spurred the co-operative societies to increased efforts in return for the subsidies they had received in peace time; the Decree of the same Ministry of 16 August 1914, dealing with the obligation of military service of those persons who had special agricultural abilities and were not replaceable by ordinary labourers; the Decree of 11 September 1914 by which the co-operative dairies were requested with the aim of making the provisioning of urban centres easier to get into touch with the latter with a view to the direct supply of the consumers: the Ordinance of the Ministry of the Interior of 26 November 1915 (1) which set up a commission for the provision of artificial ice and contained regulations for the supply of artificial ice to dairies and to despatching stations for milk. A passing mention may be made of the efforts of the Government to equip subsidiary supplies of labour capable of replacing persons attached to the freezing depots and called to the colours (2).

(1) *Reichsgesetzblatt*, No. 345, 26 November 1915.

(2) DIE FÜRSORGE DES NIEDERÖSTERREICHISCHEN LANDESAUSSCHUSSES FÜR DIE KRIEGSVERLETZTEN LANDWIRTSCHAFTLICHEN BERUFE. — BERICHT DES LANDESKULTURRATES ÜBER MILCHWIRTSCHAFTLICHE UNTERRICHTSKURSE FÜR KRIEGSINVALIDE. — KALLBRUNNEN: Measures taken during the War to Maintain the Supply of Agricultural Labour. *International Review of Agricultural Economics*, March-April 1922, p. 219.

§ 6. CO-OPERATIVE SOCIETIES FOR THE SALE OF EGGS.

The co-operative societies for the sale of eggs had begun to develop before the War in Lower Austria closely conjoined with the co-operative societies for the sale of milk, and afterwards in Upper Austria (also in close connection with the societies for the sale of milk, federated into the *Zentralbutterverkaufsgenossenschaft* of Scharding), and lastly in Galicia. They now found themselves in circumstances analogous to those exhibited by the co-operative dairies. In the first period of the War, thanks to the indefatigable work of the technical advisor on the breeding of poultry at the Ministry of Agriculture, George Wieninger, this form of co-operation continued to develop successfully in Upper and Lower Austria while in Galicia it came to an end on account of the Russian invasion.

The co-operative societies of Lower Austria which sold their produce at the branch depots of the *Niederösterreichische Molkerei*, alongside of the milk of the co-operative dairies, could even register an increase of sales in 1916, when 5,451,528 eggs were sold as against 1,815,276 in 1915.

By the Ordinance of 20 February 1916, supplemented by that of 20 May 1916 (1) the trade in eggs was centralized and put into the hands of the purchasing offices authorized by the Ministry of the Interior. Although the organization of these offices was repeatedly changed, and the agriculturists had frequently taken up a position against the system, in the field of co-operation the situation as to the sale of eggs, as well as their production and general consumption, grew steadily worse, so that these societies gradually ceased to exist.

The circumstances led to another interesting development of the production of eggs and poultry breeding in general, which received considerable support from the action of the Ministry of Agriculture, and also from the Government measures in respect to small gardens.

The success of this movement was remarkable, in spite of unfavourable circumstances, the want of grain and other feeds and the inexperience of many of the amateur breeders.

Up to August 1914 there were in working order in Austria only three large incubating stations (one in Lower Austria, one in Upper Austria and one in Bohemia): after the War there were 33 in Lower Austria alone, their capacity varying from 3000 to 5000 eggs. Of these 14 belonged to co-operative societies, 8 to companies and 11 to private individuals. Those concerned all belong to various co-operative societies and associations, which have all been brought into being by different Government offices.

Mention should be made of the attempt made in Vienna in 1915 by a women's association (*Reichsorganisation der Hausfrauen Oesterreichs*) to set up a co-operative poultry farm with the object of supplying eggs to members. Joint management by women living at a distance from the farm

(1) Contained in Nos. 48 and 146 of the *Reichsgesetzblatt*.

with a view to the utilization of kitchen waste proved impracticable, and the farm had to be turned into a co-operative undertaking on a smaller scale carried on by persons more directly interested.

§ 7. CO-OPERATIVE SOCIETIES FOR THE SALE OF LIVE STOCK.

With the object of improving the meat supply, seriously endangered by the increased army consumption, by the losses occasioned by the War in Galicia and by the closing of Hungarian export trade into Austria (1) there were set up organizations for the sale of live stock. These were from the first conducted on co-operative lines, and most of them shortly afterwards transformed themselves into central associations.

We may mention among others the Carinthian Society for the sale of live stock (*Kärnter Viehwertungsgesellschaft*) of Klagenfurt, developed into a centre for the utilization of the flesh of animals that have had to be destroyed, instituted as early as 1910 by the Carinthian Federation of Agricultural Co-operative Societies (*Kärnter Verband landwirtschaftlicher Genossenschaften*). This originally numbered 16 adherent organizations, among which were the province of Carinthia, the co-operative federations, the butchers' associations, etc. This society which preserved its original co-operative character was obliged by force of circumstances to engage in the trade in butchers' beasts. Trade in draught animals was completely forbidden.

In such circumstances and with the low level at which prices were artificially maintained, a development of co-operative stock-breeding societies was impossible. The cattle shows, in former times supplying an incentive to breeders, were less frequented and often had to be given up. The consequences of the relinquishment of all forms of encouragement and of preferential measures were serious and lasting.

§ 8. MISCELLANEOUS CO-OPERATIVE SOCIETIES.

Potato-drying co-operative societies are a form of co-operation which assumed only very limited proportions before the War. The seven existing plants nearly all belonged in fact to private undertakings.

(1) The quantity of live stock brought into Vienna was

345,384	head	in the second half year of	1914
211,859	"	" first	" " 1915
142,682	"	" second	" " 1915
102,643	"	" first	" " 1916

See also: MESSNER: Die Viehproduktion und die Fleischversorgung Oesterreich-Ungarns. Munich, 1916. — WIRTSCHAFTSGEOGRAPHISCHE KARTEN UND ABHANDLUNGEN ZUR WIRTSCHAFTSKUNDE DER LÄNDER DER ÖSTERREICHISCH-UNGARISCHEN MONARCHIE, Part 6, Vienna, 1919.

With the object of reducing to a minimum the waste unavoidable even if the better systems of preserving potatoes are adopted, the Government, following the example of Germany (2) gave considerable encouragement to potato drying by co-operative bodies, granting the drying apparatus and accessories at special prices. The business was often joined on to a co-operative warehousing society already in existence. At the end of 1916 there were 24 of these establishments in Austria, but as a matter of fact, from the constantly increasing shortage of coal, they could be only very partially utilized.

The *co-operative grazing societies*, which had received much encouragement before the War, continued working through it, notwithstanding adverse climatic conditions and the little attention that could be given to the pastures: their continued existence was due to the great want of fodder, and the foresight of the Government, who in the majority of cases released from military service in the summer months persons whose occupation was the care of live stock.

Although no particular success came of it, an interesting scheme of the Federation of Agricultural Consortia at Friuli deserves mention. The aim in view was the finding of an occupation suitable for disabled agriculturists. An attempt was made (1), partly on co-operative lines and with ample encouragement from various public offices, to introduce silkworm breeding into the northern districts. An extensive propaganda was carried out, and efforts made to find a substitute for the mulberry leaf for feeding the caterpillars. The outcome of the attempts, particularly in Pohlitz and at Nikolsberg in Southern Moravia, was not unfavourable, but no practical results were realized.

The *co-operative societies for the sale of flax* could record a satisfactory development, even apart from special regulations in their favour on the part of the Government, and although the cost of its preparation had gone up considerably: the reason of this was the growing profits, a direct consequence of the stoppage of imports from other countries. Thus the German co-operative societies of Bohemia showed an increase of sale profits of 138 to 430 *kronen*, but also an increase in the cost of preparation of 15 to 20 *kronen* for every quintal of flax scutched. Of much importance were the efforts of the Government to obtain seed for the flax-cultivators, a necessary and difficult task: before the War as a matter of fact all the seed was imported each year from the Baltic provinces of Russia.

The progress of the *co-operative societies for the preserving of vegetables* was favourable, in consequence of the large orders of the army commissariat and of the increase in the requirements of the civil population owing to the shortage of meat and flour. Among these societies there ranked

(2) BRUNN: Die Trocknereigenossenschaften, in *Nachrichten des Verbandes hannoverscher Genossenschaften*, Part 5, page 34. Hannover, 1917.

(1) *Oesterreichische landwirtschaftliche Genossenschaftspresse*, pages 6,173 and 6,200. Vienna, 1917.

first the *Sauerkrautgenossenschaft* of Mödritz near Brunn, which in 1916 reached the maximum production of 1,959,640 kilos of Sauerkraut (430,000 kilos in round numbers were delivered to the army).

On the other hand things went very badly with the business of the *co-operative distilleries*, and for the most part they had to close down their works. Only those producing yeast could continue working while using only sugar beet and spoiled potatoes. The utilization of cereals and sound potatoes was forbidden by the Ordinance of 27 October 1914. Of course the stills that went on working suffered greatly from the shortage in coal and malt. A satisfactory year's balance sheet could only be shown by those distilleries that took to potato-drying and dried on the State account potatoes and sliced beetroot. Potatoes that were difficult to sell in time of peace, so that for that reason they found their way to the distillery, naturally found a ready sale in time of war.

Co-operative mills suffered from the State control of cereals, from the coal shortage and from the competition whether of the large mills which could get plenty of orders from the *Kriegsgetreidegesellschaft* or of the small mills which could easily eke out resources by accessory occupations of all sorts and by grinding quantities of cereals illegally kept back from the requisition.

The *co-operative threshing societies* also suffered during the War, largely because they fixed too low a rate for the use of the machines. But the lack of fuel and of lubricants and the difficulty in procuring them, and finally the decrease in the number of hours during which the machines were employed (1) a consequence of the diminution of the crops, all contributed to the failure of these bodies which in time of peace had barely succeeded in holding their own. A number of them were actually dissolved during the War.

The *co-operative societies for the supply of electricity* exhibited favourable progress, though with little help from the Government, which bought up all the copper. They became necessary however to agriculture in the absence of petrol, candles or benzine. Their chief development was nevertheless after the War, when the restrictions of the Government control of metals became less.

The *co-operative society for the sale of resin* at Piesting near Vienna also did well. Before the War it had suffered from foreign competition, but on the incidence of war it acquired a kind of monopoly, whereby the raw products of the members could be sold on good terms and a very satisfactory progress noted.

The *co-operative societies* which had been set up before the war in the neighbourhood of the coast were unfortunately obliged in consequence of the War to give up work or at least greatly to restrict their activity.

(1) The co-operative threshing societies of Bohemia registered 10,808 hours of employment of the machines in 1914 and 8,060 in 1919.

CANADA.

CO-OPERATION FOR THE MARKETING OF AGRICULTURAL PRODUCE AND THE SUPPLY OF FARM REQUISITES.

A rich, but scattered, material exists for the study of agricultural co-operation in Canada. Apart from a few official reports it takes the form of articles in the *Agricultural Gazette of Canada* and other agricultural periodicals. The following list of sources utilized in the compilation of this study is by no means complete, only the more important articles being indicated.

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- The Canadian Horticulturist*, Toronto, notably the following articles:
- NIAGARA ORGANIZATION UNDER WAY. — Vol. XLIV, Nos. 1 and 2. January-February 1921.
- BAXTER (C. W.): An Ontario Sales Agency for Apples. — Vol. XLIV, No. 4. April 1921.
- N. P. G., LTD., HAD GOOD SEASON. — Vol. XLIV, No. 11. November 1921.
- N. P. G. G., LTD., DOUBLED SALES Vol. XLIV, No. 11. November 1921.

The agricultural co-operative movement is of comparatively recent origin in Canada, and its progress in recent years is due, amongst other causes, to the active encouragement given to it by the Federal and Provincial Departments of Agriculture and to the conditions arising out of the War. Canada being a comparatively new country, the development of agricultural co-operation has necessarily proceeded on somewhat different lines from those which it follows in older countries. The study which we here present offers, therefore, interesting contrasts with agricultural co-operation in European countries. Perhaps the most striking difference is the early application of co-operation to the sale of the staple agricultural products of the country and the more rapid development of this form of co-operation in comparison with co-operative credit (1) and the co-operative purchase of farm requisites.

§ 1. LAWS RELATING TO AGRICULTURAL CO-OPERATION.

There is no general Dominion Co-operative Associations Act in Canada, this branch of legislation being left to the individual provinces to develop according to their needs. The legislation under which co-operation has been and is being carried out is very varied, co-operative associations having been formed under joint-stock company laws, provincial co-operative associations acts, and special incorporating acts. In this section we give an outline of the general legislation connected with agricultural co-operation in various provinces. Any special legislation will be mentioned during the course of the articles as may be necessary.

Saskatchewan.

The main provisions of the Saskatchewan Agricultural Co-operative Associations Act, Chapter 62 of the Statutes of 1913, amended 1915 and 1920, are as follows:—

Any five or more farmers who desire to associate themselves together as an incorporated association with limited liability, may be registered as such upon signing in duplicate a memorandum of association and filing it with the Registrar of Agricultural Associations of the Saskatchewan Department of Agriculture and upon paying a registration fee of \$4.50. Associations registering under the Act may engage in co-operative production and marketing and the purchasing and selling of supplies, such selling only to be to their shareholders or to the Saskatchewan Grain Growers' Association. The word "supplies" is here interpreted to mean building and fencing material, flour, feed, and such other commodities as may be shipped in car-loads and distributed from a warehouse. The word is not to be interpreted as applying to a retail business.

(1) We do not deal with co-operative credit in this article. The subject was dealt with by Prof. W. T. JACKMAN in his article on "Rural Credits in Canada", published in our issue of August-September 1921.

Associations may purchase goods on credit from other agricultural co-operative associations, or from any other company, association or society incorporated by special Act of the Province, having objects wholly or in part similar to those of agricultural co-operative associations. (This includes the Saskatchewan Grain Growers' Association).

The number of directors may be three, six or nine, and one-third holds office until the first annual meeting, one-third until the second and one-third until the third annual meeting. Directors may pledge the credit of their association for money temporarily borrowed to pay for goods purchased, or expenses incurred in connection therewith. But the associations must sell their supplies for cash. The associations are required in handling farm supplies to deal only in bulk quantities, distributing direct from the railway or warehouse.

The proportion of agriculturists in the associations must be 75 per cent., and no transfer of shares is allowed which would reduce the total number below that percentage. Each member may only have one vote regardless of the number of the shares he may hold and a member cannot vote by proxy. The directors must so apportion the net profits as (a) to set aside 15 per cent. for a reserve fund until that fund equals at least 30 per cent. of the paid-up capital; (b) to pay interest on the paid-up capital stock not exceeding 6 per cent.; (c) to divide the remaining profits among the patrons of the association, whether shareholders or not, in proportion to the volume of business done, unless, by bye-law, it be provided that the dividend due to a non-shareholder may be retained and credited to him on account of capital stock until an amount is accumulated equal to the par value of one share. The patron then receives a stock certificate and can thereafter share in the dividends like the other shareholders.

Under the Act it was made incumbent upon all co-operative associations to adopt a standard set of bye-laws to which all must conform, though each association may afterwards adopt such supplementary bye-laws as may be necessary to regulate their own line of business.

Alberta.

Agricultural co-operation in Alberta is dealt with by the Co-operative Associations Act, Chapter 12, 1913. Under the authority of this Act, any seven or more persons who desire to associate themselves together as an incorporated association of limited liability, for the purpose of carrying on any labour, or fulfilling the requirements of any contract or undertaking by, or on behalf of, labourers, or for the purpose of conducting and carrying on any co-operative store or business, whether wholesale or retail, may do so by filing with the Registrar of Joint Stock Companies a properly executed memorandum together with a copy of the rules and bye-laws agreed upon. The number of shares to be issued is unlimited but no member can have more than one vote. The shares may be payable by instalments not exceeding 25 per cent. per instalment. Shares shall not be

transferable unless so provided by the rules. The association may repurchase shares held by any member.

In January of every year the association must send to the Registrar a general statement or annual return in such form as the Registrar requires of the receipts and expenditure, funds and effects of the association as audited, showing separately the expenditure in respect to the several objects of the association. The rules may provide for the advancing of money by the association to members on the security of real or personal property. They may also provide for the investment of any part of the association's capital in shares or on the security of any other association regulated under the same Act or of any other Provincial corporation of limited liability. The profits of the association may be applied to any lawful purpose. Disputes between members must be decided by a Board of Arbitration as provided by the rules, and from the decision of the Board there is no appeal. Any two or more of the associations may amalgamate.

British Columbia.

British Columbia, as far back as 1897, in the Farmers' Institutes Co-operation Act provided for co-operation for economic purposes. No member of an association formed under that Act could acquire more than one-tenth of the stock allotted and a member was restricted to one vote. This Act, amended in 1898, 1899 and 1902, was finally in great part repealed and re-enacted in 1909 by the Act entitled Farmers' Institutes Co-operation Act Amendment Act. This formed the basis for more comprehensive legislation in the Agricultural Associations Act, Revised Statutes for 1911, Chapter 6, Part II, amended by Chapter 2 of the British Columbia Statutes for 1913.

Part II deals with associations with share capital, and provides that 25 or more persons, on presentation of a properly signed memorandum of association to the Minister of Agriculture, may unite themselves together for any or all of the purposes following:—

- (a) The manufacturing of cheese, butter, cider, jams, pickles and spray mixtures, and the drying and canning of fruit and vegetables;
 - (b) The keeping of swine and the manufacture and sale of the various products resulting therefrom;
 - (c) The dealing in poultry, eggs, milk, cream and all other agricultural and horticultural products and in supplies required by patrons of such associations;
 - (d) The dealing in flour, feed, fertilizers, spray materials and their accessories, and in foods of all kinds for farm stock for the purpose of supplying the same to the patrons of the association;
 - (e) The erection and maintenance of a cold storage plant and the sale of ice; and
 - (f) For any purpose which may be approved by the Minister of Agriculture having for its object the development of agriculture.
- Liability of a shareholder is limited to the amount of his share or

shares subscribed for and not paid up. A shareholder may have shares to an amount mentioned in the bye-laws, but not to exceed one-fourth of the share capital. Shares are transferable subject to the consent and approval of the association, and each share carries a vote.

Section 44 of the Act provides : " An association shall be deemed to be formed upon the co-operative system if provision is made by its constitution and bye-laws for securing to all producers who are members of the association a share in the profits of the association in proportion to the value of the produce supplied by them, after payment of a dividend upon the capital stock not exceeding six per centum per annum. Provision shall also be made for enabling all producers in the district to become members of the association by limiting the number of shares to be held by any single member, or by other effective regulations."

The association may borrow from the Government, for the purpose of erecting, or acquiring and maintaining, or operating within the province, any of the industries above enumerated, a sum not exceeding 80 % of the subscribed capital, the loan being subject to the following requirements, namely:—

(1) That the district within which it proposes to operate is competent and fitted for its support, and that there is a reasonable prospect of the association being a financial success.

(2) That the location of the association is such as to prevent encroachment upon the limits of an established association, while allowing a radius to the proposed institution of at least six miles.

(3) That the association has acquired a site upon which to erect the necessary plant and buildings.

(4) That the plans of the building and the nature and cost of the proposed plant and equipment have been submitted for approval.

In addition the association must send to the Minister of Finance and Agriculture a statement showing the number of members of the association; the amount of stock paid up, which must be at least 50 per cent. of the subscribed capital; all mortgages or charges; any other information as may be required.

The loans are repayable within 20 years at 4 per cent. and with a sinking fund.

There is also a general Co-operative Associations Act which was passed in 1920 to replace an earlier act. Under the Act of 1920 any five or more persons may form an incorporated association for the purpose of carrying on any lawful business, trade or industry, other than the construction and operation of railways, the business of banking, of insurance or of a trust company. Every such association must include in its name the word "co-operative" as well one of the words as "association," "society," "union," or "exchange," but not the word "company," nor the word "limited." In the case of an association dealing with agricultural products no member shall be entitled to vote at any general meeting or be appointed a director of the association unless he has sold his main crop or produce of the year through the association, or undertakes in writing to do so dur-

ing the ensuing year, or has received consent of the directors to dispose of his crop or produce otherwise.

A member may hold any number of shares in the association. Dividends up to 8 % per annum may be paid and the remaining profits distributed among the patrons of the association whether members or not and whether vendors or purchasers. The liability of a member is limited to the amount unpaid on the shares held by him.

Manitoba.

The present Co-operative Associations Act was passed in 1916. It is a general Act covering any branch of co-operation. Under this Act seven or more persons may join together as an incorporated co-operative association. The registered name of an association must contain the word "co-operative". A heavy fine is provided for any non-co-operative company which uses the word "co-operative" in its title. The liability of the members must be limited and the word "limited" must be the last word of the title of every co-operative association. The whole business of associations must be on a cash basis. The credit of members may only be pledged for the purchase price or rental of business premises, salaries and incidental expenses, or for moneys temporarily borrowed to pay for goods purchased or expenses connected with goods purchased. The amount of capital, the amount of the shares and the manner of payment are left to the decision of each individual association. The par value of a share, however, must not exceed thirty dollars. Shares may be assigned or transferred, or may be repurchased by an association, with the authority of the directors and provided that the transaction does not reduce the total number of shareholders below seven or below 75 per cent. of the maximum number at any previous time during the life-time of the association. Associations may invest any part of their capital in any other limited liability association or corporation which has objects wholly or in part similar to the co-operative associations registered under the Act, and any corporate body may hold shares in any co-operative association registered under the Act.

The board of directors of an association may be six or nine. One third must remain in office for one year, one-third for two years and one-third for three years. The board of directors must elect a president and vice-president from amongst themselves but have the option as to whether the secretary-treasurer is to be a director. A majority of the directors constitutes a quorum. Annual meetings must be held in January or February, and semi-annual meetings in July of every year. At any meeting two-fifths of the shareholders constitute a quorum. Each shareholder has one vote only, regardless of the number of shares he may hold. No shareholder may vote by proxy. The adoption of amendments to bye-laws and of supplementary bye-laws rests upon a two-thirds majority vote of the shareholders and upon the approval of the Registrar of Co-operative Societies.

The directors must apportion the profits of the association by (a) setting aside not less than ten per cent. for a reserve fund until the fund is equal to at least thirty per cent. or more of the paid up capital stock; (b) paying interest on the paid up capital stock at a rate not exceeding seven per cent. per annum; and (c) by dividing the remainder of the profits amongst the patrons of the association who are shareholders in proportion to the volume of business done with the association. It is provided, however, that associations may allow an equal rate of dividend to non-shareholder patrons on the amount of business done with them. In this case the dividend must be credited to the account of the non-shareholder patron until an amount has been accumulated equal to the par value of one share. A stock certificate is then issued to the patron and he thereafter participates in the dividends as do the other shareholders. It is also provided that associations may pay employees a dividend on wages or salaries equal in rate to the dividend paid to shareholders. If an employee is not a shareholder this dividend is credited to his account until an amount has accumulated equal to one share; a stock certificate for the share is then issued to him. All associations must send in an annual report to the Registrar of Co-operative Societies.

Nova Scotia.

The agricultural co-operative societies of Nova Scotia are incorporated under one of three Acts — An Act to Facilitate the Incorporation of Farmers' Fruit, Produce and Warehouse Associations (Chapter 33, Statutes of Nova Scotia, 1908); An Act to Further Facilitate the Incorporation of Farmers' Fruit, Produce and Warehouse Associations (Chapter 22, Statutes of Nova Scotia, 1912); An Act to Encourage the Incorporation of Farmers' Co-operative Societies (Chapter 4, Statutes of Nova Scotia, 1914).

The Act of 1908 enacts that any number of persons not less than five may form themselves into a limited liability company, provided no subscriber takes less than one share, for the purpose of buying, selling, bartering, taking on consignment, dealing in and packing fruit, fodder and other farm produce; buying, selling, leasing, erecting, improving, managing and operating storehouses, warehouses and other buildings which may be incidental or conducive to the purposes of the company, and carrying on the business of warehousemen in connection therewith. The company must be registered with the Registrar of Joint Stock Companies. Every company must have the word "Limited" as the last word of its name. The capital stock of the company must not be less than \$1,000, of which one-half must be subscribed. The number of directors of a company must not be less than three nor more than seven; they must be elected annually. At all annual and general meetings each shareholder has one vote for each share held by him.

The Act to Further Facilitate the Incorporation of Farmers' Fruit, Produce and Warehouse Associations provides that any number of com-

panies, not less than ten, incorporated under the provisions of Chapter 33, Statutes of 1908, or for a like purpose under the Nova Scotia Companies Act, may form themselves into a central company for the buying, selling, bartering, taking on consignment or disposing of on consignment and packing and dealing in fruit, fodder and other farm produce as well as fertilizers and artificial manures of all kinds; and for the warehousing of the above as well with cold storage as otherwise, and marketing and transporting and carrying on the business of warehousemen and shippers of fruit, fodder and other farm produce. The shares taken by any company in the Central must not be less than 20 % of the nominal capital of that company. The Central may buy, build, lease, improve, manage and operate any buildings it may require, and may sell, sublet or otherwise dispose of them. It may lease, buy, or otherwise acquire real estate and sublet, sell or otherwise dispose of the same. Wharves, box cars, refrigerator cars and steamships and other vessels may be built or acquired by the Central. For the purpose of organizing a central company, each shareholder company sends three of its shareholders to the general meeting who elect from amongst themselves a president, a secretary and one director for each shareholder company. This procedure is carried out at every following annual meeting. The capital stock of the Central must not be less than \$50,000. All calls made upon stock must be paid by the subscribing company, and the capital stock of the shareholder company is liable for all calls made by the directors of the central company. The ordinary executive work of the Central is done by the board of directors who, at their meetings, have as many votes as the company they represent holds shares in the Central. The directors may appoint a business manager. No one call upon stock may exceed 25 % of the subscribed stock. The disposal of the profits, either as a dividend, working capital or reserve fund, is left to the discretion of the directors. The central company must be of limited liability and the word " Limited " must form a part of the name of the Central.

An amendment to this Act, passed in 1913, gives to local and central companies the power to deal in all kinds of spraying and fruit packing materials and implements, flour and mill feeds and general merchandize.

The Farmers' Co-operative Societies Act, 1914, enacts that any farmers' co-operative society may be incorporated under the Nova Scotia Companies' Act and that the Farmers' Co-operative Societies Act applies to it provided that the society is composed of not less than fifteen persons; that each subscriber resides in a farming district and is actually engaged in farming; and that its objects are (a) to purchase for the members or shareholders, manures and artificial fertilizers of all kinds, seeds, feeding stuffs, spraying materials and outfits, and farming implements of all kinds; (b) to ensure the purity of the feeding stuffs, seeds, manure and fertilizers furnished to the members or shareholders and to have any requisite tests or analyses made for the purpose; (c) to secure the best market for the sale of the products of the farms of its members or shareholders, and to arrange for their transportation; (d) to become a member or a shareholder by original subscrip-

tion or otherwise, or a director or other officer of any other company which is or may be incorporated under the Nova Scotia Companies' Act and which provides under its Memorandum of Association that each of its members or shareholders must be a society incorporated under the Nova Scotia Companies Act and one to which the Farmers' Co-operative Societies Act applies.

The Governor-in-Council may appoint an Inspector of Farmers' Co-operative Societies who would be under the direction of the Provincial Secretary. The Inspectors' duties are to organize farmers' co-operative societies, to assist and advise these societies in their organization and work and generally to increase their efficiency. The Inspector must report annually respecting the societies; he must also collect and disseminate information on agricultural co-operation in other countries. The Inspector has the same powers as one appointed under the Nova Scotia Companies Act and any officers and agents of a society refusing to produce for examination any required book or document incur the same penalties as provided under the Companies Act.

Quebec.

Co-operative Agricultural Associations in Quebec are provided for under the Revised Statutes of 1909, amended in some important particulars by the Statutes of 1910-11, and in 1912, 1918 and 1920. The objects for which an Association is formed must be one or more or all of the following:— The improvement and development of agriculture or of any of its branches; the manufacture of butter or cheese, or both; the sale and purchase of live stock, farm implements, commercial fertilizers and other articles useful to the agricultural classes; the purchase, preservation, transformation and sale of agricultural products.

The association must consist of at least 25 persons to form a joint stock company of variable capital and limited liability, and the shares be of the value of \$20 each, payable in 4 yearly instalments of \$5 each, or as the association may decide by bye-law. No member can hold more than \$20 of capital stock nor more than \$1,000 of the same. The shares are transferable only to persons or associations who have been accepted by the board of directors. Agricultural societies and farmers' clubs may take shares in the association with the permission of the Minister of Agriculture. Societies for the manufacture of dairy products may also become members of a co-operative association. An agricultural co-operative association may become a member of another agricultural co-operative association, but it may not subscribe more than one share. An association may acquire and hold lands, and may sell, lease or otherwise dispose of them, but must not hold more than five hundred acres at a time.

The affairs of the association are managed by a board of five directors, who elect from amongst themselves a president and vice-president. Three directors form a quorum. All directors are elected or re-elected at the annual general meeting. Every director of a farmers' club, agricultural

society, breeding syndicate, society for the manufacture of dairy products, or other co-operative society, which is a member of another co-operative association may be appointed a director of that association and remains in office until the election of his successor even if he has ceased to be a director of his own society. The association or its board of directors may make, amend or repeal the bye-laws relating to the admission of shareholders, the transfer of shares and the maximum number of shares for which a shareholder may subscribe. The board may borrow on the security of the unpaid portion of the shares subscribed. The total amount of the sums borrowed, however, must not exceed four times the aggregate amount of the subscribed shares and reserve fund. The services of the board of directors must be gratuitous but if it is not against the bye-laws of the association the president may be appointed manager of the association and receive remuneration for his services in that capacity.

The decisions of the general meetings are by majority of votes. Each shareholder has one vote only whatever may be the number of shares he holds. No voting by proxy is allowed. The president or vice-president of any shareholder society represents that society at the general meetings and votes in the name of the society which he represents. To be entitled to vote a member must have subscribed for one or more shares at least three months before the meeting and have paid at least three days before the meeting at which he intends to vote all yearly instalments due on his shares, but in the case of the first general meeting after the formation of the association, he may vote no matter at what date previously he has subscribed for his shares.

The general meeting decides the amount of the profits to be allotted, and may provide for a reserve fund. So long as this fund is not equal to the subscribed capital the total amount of the dividends distributed must not exceed eight per cent. of the paid up capital. When the reserve fund is equal to or greater than the subscribed capital the association may, after having paid dividends of not more than eight per cent. and after having set aside at least ten per cent. of the profits for the reserve fund, distribute the remainder of the profits amongst the shareholders according to (a) the amount paid by each shareholder for his purchases from the association; or (b) the amount paid by each shareholder for the preservation, preparation or transformation of the products of his farm or live stock; or (c) an amount equal to the value of such products; or (d) the amount received by each shareholder for the produce of his farm or live stock when sold through the association; or (e) the aggregate of such amounts or any of them. An association which buys and sells dairy produce may pay dividends to a shareholder who is a manufacturer or proprietor of a dairy factory in proportion to the dairy products of the factory sold by or through the association. A shareholder who buys from the association produce of shareholders sold by or through the association or prepared or transformed by it, cannot receive dividends upon such purchases.

The property of co-operative associations is exempt from all Government taxes. Associations may auction any registered thoroughbred stock

belonging to them and any agricultural products belonging to members. The books and bye-laws must be open for inspection by members at least one day a month. The Minister of Agriculture may have the books examined at any time. The accounts of associations must be closed on 31 December of every year. A statement of affairs must be made out during the first week in January and a copy sent to the Minister of Agriculture before 15 February. The penalty for neglect or refusal is \$5 per day for every day after the required date, and any director or manager who knowingly permits such a default is liable to the same penalty.

If an association ceases operations for two years the Minister of Agriculture may, at the request of the board of directors, declare the association dissolved, realize its property and apply the proceeds to the payment of the association's debts and divide the assets amongst the shareholders in proportion to the shares subscribed and paid.

Ontario.

In Ontario there is no special co-operative law. Many co-operative associations have, however, been organized under the old general Stock Companies Act. This Act has been amended and consolidated in Chapter 31 of the Statutes of 1912. In the Statutes of 1910 there is a provision which has been re-enacted in the Statutes of 1912, by which "the provincial secretary may, under the seal of his office, have, use, exercise and enjoy any power, right or authority conferred by this Act on the Lieutenant-Governor but not those conferred on the Lieutenant-Governor-in-Council". Under this provision and the general clause which precedes it, 5 or more persons who have become subscribers to a memorandum of agreement in due form, may obtain a certificate of incorporation from the provincial secretary. A great deal of latitude as to constitution and bye-laws, rules and regulations, etc., is permitted.

The Department of Agriculture with the consent of the Minister has adopted certain model bye-laws as a basis on which to form co-operative associations for the province. The bye-laws do not form part of the letters patent granted by the provincial secretary and can be amended at any time to suit the needs of the association and to meet individual cases and circumstances.

§ 2. THE CO-OPERATIVE SALE OF GRAIN.

The grain industry is the most important branch of agriculture in Canada and was the first to which co-operation was applied on a large scale. The chief provinces devoting their energies to grain growing are the three prairie provinces of Manitoba, Saskatchewan and Alberta.

Associations of Grain Growers. — Early in the present century three great agricultural associations were formed in these provinces. The Saskatchewan Grain Growers' Association was established in 1901; and in the following year were formed the United Farmers of Alberta and the

Manitoba Grain Growers' Association, the name of which was changed in 1920 to the United Farmers of Manitoba. These associations, each of which was incorporated by an Act of the provincial legislature were precluded from engaging in business by the clauses of their constitution. Their energies were directed in the main to watching legislation relative to the grain growers' interests, particularly that affecting the marketing, grading and distribution of their grain, and to suggesting to Parliament from time to time the passing of any new legislation to meet changing conditions and requirements.

In 1915 the Saskatchewan Grain Growers' Association obtained the necessary alterations to its charter in order to become a co-operative business association, dealing, purchasing and shipping the products of, and the supplies necessary for the farm. It is permitted to pledge its credit according to the methods usually adopted by any commercial company in the ordinary way of business, and in addition it may issue bonds or debentures, the only restriction being that the issue, sale and transfer thereof must be limited to members of the association, to registered agricultural co-operative associations, to associations having similar objects, and the members and shareholders of such associations.

Since the Association started trading it has built up a big business, which is carried on through its trading department at the head office in Regina. Its turnover in 1920 was \$1,400,000, and in 1921 it was \$900,000 with a profit of \$6,616.

The Grain Growers' Grain Company.— In 1905 a committee was appointed by the grain growers' associations to study the question of marketing. The result was the organization, in 1906, under the Manitoba Joint Stock Companies' Act, of the Grain Growers' Grain Company, Limited, for the purpose of doing a commission business, at that time in grain only. In view of the rapid development of its business the Company applied for Dominion incorporation and, in May 1911, was granted a Dominion Charter by Act of Parliament. By that Act the capital was fixed at two million dollars divided into shares of \$25 each, no shareholder being allowed to hold more than 40 shares. Only farmers or owners or lessees of farms, or their wives, could be shareholders, except by a resolution adopted by two-thirds of the shareholders of the company. Each shareholder had but one vote. At the annual meeting, if the profits justified it, 8 per cent. was paid on the par value of the subscribed capital stock. A certain sum was then placed to the reserve fund, and, if a surplus still remained, it was distributed amongst the shareholders, on such a basis and in such proportion as the meeting determined. The reserve fund could be used, together with other capital, in carrying on the business of the company.

The objects of the company were "to produce, manufacture, import, export, buy, sell, deal in and deal with all cereals, fruits, vegetables, animal or other products of the farm, all products or by-products thereof, and all machinery, implements, goods, wares and merchandize which may be used in the production and manufacture of products of the farm, and all articles, substances and things which may be utilized in the said

production or, in the maintenance, cultivation, improvement and development of farms; and without restricting the generality of the foregoing expressions, to carry on the business of a farmer in all its branches."

The Saskatchewan Co-operative Elevator Company. — Five years later, the Saskatchewan Co-operative Elevator Company was formed on the initiative of the Saskatchewan Grain Growers' Association. It was incorporated in March 1911 by an Act of the Saskatchewan Legislature which gave it the power to construct, acquire, maintain and operate grain elevators within Saskatchewan, to buy and sell grain and generally to do all things incidental to the production, storing and marketing of grain.

The capital stock of the company is not a fixed amount as is the case with ordinary companies; it may be changed from time to time by the Government. This is because the Government advanced to the Company a large percentage of its subscribed capital and therefore retains control of the amount of stock the company may issue. The stock is divided into shares of fifty dollars which can be held only by farmers, and no person can hold more than twenty shares. Only 15 per cent. of the face value of the shares need be paid in cash; the remaining 85 per cent. is subject to call. The liability of a shareholder is limited to the amount of stock he holds.

The central management is in the hands of a board of nine directors. Wide powers have been given to the Board of Directors because such a central body has a great advantage over a number of scattered units in such matters as selling the grain, employing the managers, inspecting elevators and records, purchasing building materials and supplies, making financial arrangements, etc.

Any number of shareholders may request the Directors of the company to buy one of the elevators at their shipping point, or to build a new one. It must appear to the satisfaction of the Directors "that the amount of shares held by the supporters of the proposed elevator is at least equal to the value of the proposed elevator, that fifteen per cent. of the amount of such shares has been paid up and that the aggregate annual crop acreage of the said shareholders represents a proportion of not less than 2,000 acres for each 10,000 bushels of elevator capacity asked for." These requirements are designed to secure and retain the interest and support of a sufficient number of the actual grain growing farmers to ensure the success of the local elevator, even if no grain other than that of the shareholders were handled by the elevator. No pledge or guarantee of any kind is required of the shareholder; he is as much at liberty as any other farmer to ship his grain as he pleases or to sell to the highest bidder; his interest in the company, however, makes it practically certain that he will do his business through it.

Each local elevator has a Board of Management consisting of five of the local shareholders elected annually. At all meetings of the supporters of the local elevator each shareholder has one vote for each share held by him up to five. The local elevators are represented by delegates at

the general meetings of the company; each delegate has but one vote and no proxies are allowed.

For the work of organization the Act provides for a Government loan not exceeding \$6,000 repayable in twenty annual instalments. The Government advances to the company in aid of the acquisition or erection of any local elevator a sum not exceeding 85 per cent. of the estimated cost of the elevator. The company has wide borrowing powers on the security of the part of its stock that is not paid up, on the security of grain, and on real or personal property, etc.

The balance remaining of the money earned by the company, after expenses of operating and maintaining the elevator and the amount due to the government on loans are paid, is distributed as follows: From net profits there may be paid to shareholders dividends not exceeding 10 per cent. Any surplus over and above that but not exceeding 50 per cent. may at the company's discretion be paid (a) to the shareholders proportionately to the volume of business done, or (b) to the supporters of locals on the basis of aggregate relative net financial results of the respective locals, or (c) to the shareholders and supporters of locals according to each of the two preceding schemes.

In 1920 an Act to Amend an Act Respecting the Saskatchewan Co-operative Elevator Company, Limited, was passed. By this amending act power is taken to authorize the government from time to time and on such terms and conditions as may be agreed on with the company to lend to the company for the purpose of aiding in the construction or extension of terminal elevators at points outside the province, or towards reimbursing to the company moneys already expended for that purpose, a sum not exceeding fifty per cent. of the cost or estimated cost of such elevators or of the extensions.

While no amount is specified in this Act, it was stated in the Legislature that it was proposed to advance one million dollars for which the Government would take a first mortgage on the entire plant including the hospital elevator.

Table I (page 485) shows the progress of the company from 1911 to 1921 inclusive.

The report for the year ended 31 July 1921 states that a net profit is shown of \$279,414, from which an 8 per cent. dividend was paid, leaving \$167,430 in hand.

During the period of control of grain marketing, some important services in connection with the work of the Country Elevator and Commission Departments were suspended. These departments have now resumed their normal activity. During the year 1920-21 the Country Elevator Department handled 26,195,943 bushels of grain through the 320 elevators operated, an average of 81,862 bushels per elevator. In addition to the grain handled through the elevators, 1,794,494 bushels were shipped over the platforms, making a total of 27,990,437 bushels. Of this total 27,125,418 bushels, or about 97 per cent. of all the grain taken in at the country elevators, was handled by the Commission Department. The

TABLE I. — *Statistics of the Saskatchewan Co-operative Elevator Company Limited, from 1911 to 1921.*

Year	Number of elevators at 31 July	Bushels of grain handled during year ended 31 July	Number of shareholders at 31 July
1911	46	—	2,580
1912	140	3,250,000	(1)
1913	137	13,000,000	9,000
1914	192	19,465,290	12,500
1915	210	13,744,653	15,000
1916	230	43,000,000	18,000
1917	258	34,558,637	20,000
1918	298	27,066,261	22,000
1919	308	21,841,556	22,000
1920	324	20,324,772	22,000
1921	339	27,990,437	22,000

(1) Figure not available.

Terminal Elevator Department, in charge of the terminal elevators at Fort William and Port Arthur handled 21,255,856 bushels; the report states that although the combined capacity of their terminal elevators constitutes only about 10 per cent. of the total available accommodation, approximately 15 per cent. of all the grain received at Fort William and Port Arthur was handled by them.

The Alberta Farmers' Co-operative Elevator Company. — The example of Saskatchewan was soon followed by Alberta, where the United Farmers formed in 1913 the Alberta Farmers' Co-operative Elevator Company. This was also incorporated by an Act of the provincial legislature. The incorporating Act embodies most of the provisions contained in that of the Saskatchewan Co-operative Elevator Company. The amount of capital is to be fixed from time to time by the Lieutenant-Governor-in-Council. A member cannot hold more than twenty shares of \$60 each, and he has but one vote. The affairs of the company are managed by nine directors who constitute the Central Board of Management and may receive remuneration.

In addition to operating grain elevators the Company may buy and sell and generally do all things necessary to the production, storing and marketing of grain; it may act as commission or general agents for any person, company or corporation in the purchase, selling, storing and delivery of any goods required by farmers. The Company could not start in business until twenty locals were organized. A local elevator may be organized by farmers owning or cultivating an annual grain crop acreage

of at least 6,000 acres tributary to any shipping point and subscribing for an amount of stock at least equal to the value of the proposed elevator; 20 per cent of the stock subscribed by shareholders desiring an elevator must be paid prior to the erection or acquisition by the company of such elevator, and the remaining 80 per cent within four years from the date of subscription. The local Board of Management consists of five directors elected by the local shareholders, who also elect three delegates, or such other number of delegates as the Company by bye-law may determine, to attend the general meetings of the Company. At the meetings of the local shareholders as well as the meetings of the company members have a vote for each share which they hold. The local Board of Management have such powers and duties as are determined by the bye-laws of the Company or as may be delegated to the Board by the Directors.

Provisions is made for loans at 5 per cent. from the Government for the purpose of aiding in the acquisition, erection, extension or re-modelling of any elevator, the loan not to exceed 85 per cent. of the estimated cost. Out of the surplus profits the Company may pay a dividend not exceeding 8 per cent. From the balance a certain amount, as the directors decide, shall be placed to a reserve fund. The remainder is divided amongst the shareholders and patrons on a *pro rata* basis according to the business transacted through the company by each.

The United Grain Growers, Limited. — The Grain Growers' Grain Company, Limited, and the Alberta Farmers' Co-operative Elevator Company, Limited, were amalgamated in 1917, the combined company being known as the United Grain Growers, Limited. The Head Office of the company is at Winnipeg. The company includes about 330 local associations and the total membership at 31 August 1920 was 35,929. Only persons who are farmers or owners or lessees of farms, or their wives, are eligible to hold shares in the company and no shareholder may hold more than one hundred shares. In no case is a shareholder entitled to more than one vote and voting by proxy is not allowed. The authorized capital stock is five million dollars divided into shares of twenty-five dollars each. The affairs of the company are managed by a board of twelve directors, elected for three years. Any shareholder owning one share in his own right and not in arrears with any call may be elected a director. The executive committee consists of a President, First Vice-President and three directors. Locals of the company are formed by the company directors who have the power to define the territorial limits of the local. No local must have less than forty shareholders who must have subscribed, among them, not less than two hundred and sixty-seven shares. A board of five members manages the business of the local. Each local is entitled to send one delegate to the annual and other meetings of the company, but any local having a membership of 188 or more may send two delegates.

The following table gives some details of the two primary companies and of the amalgamated company.

TABLE II. — *Comparative Statement of the Grain Growers' Grain Company Limited, and the Alberta Farmers' Co-operative Elevator Company, Limited and of the two Companies when Amalgamated under the Name of the United Grain Growers, Limited, 1906-1920.*

Companies	Shares allotted	Capital subscribed	Capital paid-up	Grain receipts	Profits
		\$	\$	Bushels	\$
The Grain Growers' Grain Company, Limited					
1 September 1906 . .	1,000	25,000	5,000	—	—
30 June 1907	1,853	46,325	11,795	2,349,000	790
» 1908	2,932	73,300	20,385	4,990,541	30,190
» 1909	7,558	188,950	120,708	7,643,146	52,902
» 1910	14,131	353,275	292,957	16,332,645	95,663
» 1911	24,602	615,050	492,062	18,845,305	69,575
» 1912	27,321	683,000	586,472	27,775,000	121,614
31 August 1913 . . .	32,500	809,950	645,362	29,975,000	164,333
» 1914	42,477	1,061,925	771,409	29,920,225	151,081
» 1915	47,976	1,199,400	867,422	18,821,402	226,963
» 1916	57,605	1,440,160	1,073,180	48,375,420	572,804
» 1917	68,230	1,705,700	1,357,382	27,722,552	607,899
The Alberta Farmers' Co-operative Elevator Company, Limited					
30 June 1914	9,428	565,680	101,639	3,774,396	17,216
31 July 1915	12,127	727,620	163,869	5,039,100	28,826
31 August 1916 . . .	14,333	859,980	301,737	19,320,556	282,484
31 August 1917 . . .	21,527	1,291,620	563,689	16,375,333	236,502
United Grain Growers, Limited					
31 August 1918 . . .	115,642	2,891,050	2,159,763	29,879,672	441,760
» 1919	119,688	2,992,200	2,415,185	22,203,007	148,549
» 1920	125,208	3,130,200	2,608,547	24,503,231	463,676

The following figures show the number of elevators and flour warehouses owned by the company at 31 August 1920.

	Alberta	Saskatchewan	Manitoba	Total
Elevators	150	36	32	218
Flour warehouses.	148	30	55	233

In addition, the company leased 129 elevators in Manitoba

The company also operates two terminal elevators at the head of Lake Superior. The structure at Port Arthur holds 720,000 bushels and is owned by the company; the other, at Fort William, is leased from the Canadian Pacific Railway Company and has a capacity of 2,500,000 bushels.

The report of the United Grain Growers, Ltd., for 1920-21 shows that the profits for the year were \$233,743 (subject to government taxes) as compared with \$467,676 for the previous year. A 6 % dividend, amounting to \$161,709 was paid to the shareholders. A special reserve of \$50,000 was set up for contingencies and the sum of \$4,000 was transferred to the general reserve of the company which now totals \$1,765,000. The shareholders' capital and surplus amounted to \$5,196,556. The paid-up capital was \$2,765,685.

The Charter of the Company gives it very wide powers, so that, if found desirable, the company may legally expand its business activities in almost any interest of its shareholders. It has a farm machinery and supplies purchasing department and a live stock department, as well as the following subsidiary companies:—

1. The Grain Growers' Export Co., Incorporated, of New York, organized under the New York State Laws. This company deals chiefly in United States grain and in 1920-21 earned a profit of rather less than \$250,000.

2. The Grain Growers' Export Co., Ltd., incorporated under the laws of Canada, with head office in Winnipeg. This company is under the supervision of the Manager of the New York company. It did considerable business in 1920-21 and earned a profit of \$132,000. Some of the export business was handled through Vancouver.

3. The Grain Growers' Guide Publishing Co., Ltd., which publishes the official organ of the United Grain Growers, Ltd., and owns the Public Press, Ltd., by which it is printed. It has lately entered into an agreement with the Nova Scotia Apple Growers, Ltd., and the United Farmers' Co-operative, Ltd., of New Brunswick, for the issue of a paper under the name of the *United Farmers' Guide*.

4. The United Grain Growers' Sawmills, Ltd., which was formed for the cutting of lumber and its supply to the shareholders. In 1920-21 logging operations were discontinued and expenses will be kept at a minimum until such time as the cost of logging has come down to a point at which lumber can be manufactured at a profit.

5. The United Grain Growers' Securities Company, Ltd., which writes various kinds of insurance and operates a land commission agency.

6. The United Grain Growers (B. C.), Ltd., was formed for various purposes. Its main business was the distribution of supplies to British Columbia farmers. It has also a live stock branch which handled 3,540 carloads of live stock in 1918, 5,257 carloads in 1919 and 5,654 carloads in 1920. In 1920-21, the company was carried on at a loss and was accordingly disposed of.

Efforts to Organize a Wheat Pool.—In 1919 the wheat crop of Canada

was handled by the Canadian Wheat Board. In 1920 this control was discontinued and in consequence a plan was promulgated by the co-operative grain growers whereby the control should be taken by them. The matter was discussed at a meeting of the Canadian Council of Agriculture held in July 1920, and a committee, composed of the president of the United Farmers of Alberta, the Manager of the Saskatchewan Co-operative Elevator Company and the Manager of the United Grain Growers, Limited, was formed to enquire into the feasibility of the plan. This committee, the Wheat Markets Committee, reported favourably and it was decided to form a committee consisting of one representative each from the United Farmers of Alberta, the Saskatchewan Grain Growers' Association, the United Farmers of Manitoba, the United Farmers of Ontario and two representatives each from the Saskatchewan Co-operative Elevator Company and the United Grain Growers, Limited. This committee of eight was given power to select a ninth member. The committee was asked to make arrangements for the formation of a wheat marketing agency, to negotiate with the co-operative grain companies for the use of their facilities to any extent necessary for handling the wheat in the pool, to take the necessary steps to secure incorporation and to work out the details for financing the pool.

In addition to their report on the plan, the Wheat Markets Committee presented a draft agreement for consideration such as it was proposed to ask the grain growers of Canada to sign. The draft suggested that the central selling agency should be known as the United Farmers' Grain Corporation and that it should be a non-profit undertaking with its principal office at Winnipeg. The first clause bound the growers to deliver to the corporation for sale all the wheat grown by them at any place in Canada for five years. The corporation was to agree to sell the wheat at the best prices obtainable and to pay the whole amount received less handling, grading and selling charges. The corporation was to be authorized to establish selling, statistical or other agencies in any city in the world. The growers were to agree to deliver to or at the order of the corporation all wheat and the warehouse receipts covering it, when and where directed by the corporation. The corporation was to be given power to borrow money on the wheat delivered to it for sale and to exercise all the rights of ownership without limitation. The growers were to bind themselves to pay a forfeit of a certain amount per bushel on all grain sold other than through the corporation. It was agreed that the contracts signed would not become effective until the corporation had obtained similar contracts covering at least 60 per cent. of the wheat crop, approximately 10 million acres of wheat.

At first it was hoped to form the corporation in time to market the 1921 wheat crop, but this was not found possible owing to the size of the scheme and the many difficulties to be overcome and at the end of 1921 the Canadian Council of Agriculture decided not to proceed with the project but to ask the federal government to re-appoint the Wheat Board.

§ 3. CO-OPERATIVE LIVE STOCK MARKETING.

The principal centres of the live stock industry of Canada are the provinces of Quebec, Ontario and Saskatchewan, and it is in these three provinces that the co-operative organization of shipping, grading, stock yarding and marketing has been most largely developed. It has also been organized, however, in the Maritime Provinces (Nova Scotia, New Brunswick and Prince Edward Island) and recently an export cattle-pool covering the whole of Canada has been formed by the United Grain Growers, Limited.

Ontario.

Co-operative live stock shipping in Ontario started in 1914 but it is only since 1917 that the movement has reached any proportions.

The following suggestions, rules and regulations were advanced by the Co-operation and Markets Branch of the Ontario Department of Agriculture and govern the co-operative shipping and marketing of live stock in the province :

(1) Where there is already a business organization of farmers in the district suitable for the purpose, the shipping of live stock should be co-ordinated with such, and a special live stock department of the company established. Care should be taken not to over-organize the district, especially with a multiplicity of business organizations.

(2) Some most successful shipping is done by farmers' clubs. Here also a special committee should be appointed to handle the business.

(3) Where there are no local organizations through which to work, a special live stock shipping association might be formed.

It was recommended, that, in any event, a simple set of rules such as the following should be adopted :

Name. — This organisation shall be called the Live Stock Shipping Association.

Objects. — The object shall be to market live stock in carload lots, and to buy and sell feeds in wholesale quantities.

Members. — Any farmer in district may become a member by paying the annual membership fee and agreeing to abide by all the rules governing the association. A member may be expelled for cause by the members in general meeting.

Fee. — Each member shall pay an annual membership fee of \$5, which fee may be retained by the association if the member fails to abide by any rule, or rules, of the association. The decision as to retaining such fee, or fees, shall be with the members in general meeting.

Committee. — A committee of 3 members shall be appointed to have charge of all live stock shipping by the association.

Manager. — A manager shall be appointed by the committee, and he shall be paid a commission of $1\frac{1}{2}\%$ of the selling price of the stock sold, or at the rate of . . . cents per head of hogs and . . . cents per head of cattle.

Duties of Manager. — The manager shall make arrangements for all shipments, weigh and (where possible) grade each member's shipment, load cars, and sell cars under the direction of the committee, and make returns to members.

Shipping Day. — The committee shall designate the shipping days, or, if the supply warrants it, regular shipping days. Each member having stock to ship shall notify the manager, at least 3 days previous to the day of shipment, as to the number and kind of stock he will have for such shipment.

Delivery of Stock. — Each member shall deliver on shipping day the number of live stock agreed upon with the manager beforehand. Each member shall mark his cattle with a mark designated by the manager.

Grading. — The manager shall grade all hogs delivered into one of the following grades: Heavies, Selects, Lights, Sows or Stags. Each member's cattle shall be marked and sold separately.

Losses. — Any losses not covered by the regular charges shall be met out of the general funds of the association.

Payment to Members for Stock. — The manager shall sell all stock for cash and shall first deduct the total expenses from the total amount received for each shipment. The remainder of the money received shall be paid to the members in proportion to the value of each member's shipment. The manager shall make all payments by cheque as soon as practicable.

Auditors. — The association shall appoint two auditors who shall audit the accounts of the manager as soon as practicable after each shipment.

Changing Rules. — These rules may be amended by a two-thirds vote in the affirmative of the members present at any regular meeting.

To these rules, others might be added regarding meetings, quorum, voting, etc., if thought desirable.

With regard to methods of management, the following suggestions were made:

Capital. — A live stock shipping association can be successfully handled without capital, if members are willing to wait for returns until after the sale is made. This is usually only a few days after shipment, and is no hardship. If cattle or hogs are sold on the stockyards, the cheque in payment is made at the time of sale, and returns can be made to members almost immediately. When capital is used to pay members at the time of delivery of their hogs or cattle, care should be taken to make such payment low enough to provide for all expenses, shrinkage, losses, price changes, etc. Preferably, however, no capital should be used and members paid actual money received for their stock, less expenses.

Grading. — It is essential that all shipments of hogs should be graded, and each grade sold separately. This does not mean that only select hogs be shipped, but if inferior hogs be shipped they should be sold as such. A select hog is one weighing 185 to 220 lbs., of the bacon type and properly finished. An endeavour should be made to prevent members shipping unfinished hogs.

Manager. — It would in many instances be desirable to interest one of the local buyers of the district in this co-operative shipping to obtain his services as manager. The manager should at least occasionally accompany shipments to market.

Payment to Manager. — The manager may be paid a commission, say of $1\frac{1}{2}\%$ of the sale price of the live stock or so much per head on the following suggested scale. Cattle over 1,000 lbs., \$1; Cattle 500—1,000 lbs., 75 cents; Cattle under 500 lbs., 50 cents; Calves, 15 cents; Hogs, 10 cents; Sheep, 10 cents. The preferable method is perhaps the percentage basis, as requiring less book-keeping.

Method of Sale. — The stock may be sold, (a) F. O. B. shipping point, (b) weighed off cars, or (c) watered and fed. Stock may be sold direct to packing house or through a commission firm on the stockyards. The more desirable method for continuous shipments is to sell through a commission firm, as the stock is sold on a competitive market and usually brings its actual market value on the day of sale.

Fixed charges. — Fixed charges in the Stock Yards market are: Unloading, \$1 per car for cattle and hogs; Yardage, hogs and sheep 6 cents; cattle and calves 10 cents; Feed, varies; Insurance, 10 cents per car; Commission, \$8 per single deck, \$13 per double deck, for hogs and sheep, \$13 per car of cattle.

The following example of a member's shipping statement was also given by the Department of Agriculture:

..... LIVE STOCK SHIPPING ASSOCIATION.

Shipping Statement.

Name of Shipper — John Smith

Guelph, Ont., Aug. 16th 1918.

Address — Guelph, R. R. No. 4.

Shipment No. 4.

No.	Class of Stock	Mark	Wt. at Shipping Point	Selling Wt.	Price	Returns
3	Cattle	1	3060	3030	15 c.	\$ 454.50
Total...						\$ 454.50

Charges deducted :	Freight	\$ 1.92
	Selling chgs	1.80
	Feed . . . . .	.72
	Yardage . . . . .	.75
	Unloading . . . . .	.12
	Insurance . . . . .	.01
	Mgt. comm.	2.40
	Res. Fund	1.13

Total . . . \$ 8.85

Balance due . . . \$ 445.65

Enclosed find cheque for this amount.

JOHN WILSON, Manager.

The charge noted in the above statement called reserve fund is for the purpose of covering any accidents in shipments whilst the stock is still in possession of the association. To cover such loss in transit the usual method is to assess each member so much per animal shipped, some clubs charging 15 cents per head for cattle and 5 cents per head for hogs and sheep.

The most important co-operative livestock marketing association in Ontario is the United Farmers' Co-operative Company of Ontario. In 1914 the company started to take consignments of live stock from the local farmers' associations and to sell them through one of the commission firms which had a seat on the Live Stock Exchange. In 1919 the company purchased its own seat on the Exchange, organized its own commission department and started to take shipments direct. The first shipments were received in February 1919. The progress made by this department is shown by the fact that in the first two weeks of February 1919 it handled 33 cars of live stock, valued at \$79,919, and in the corresponding two weeks of February 1920, 197 cars of live stock, valued at \$463,000, were handled. In all in 1920 the live stock department did a business of over 8 1/2 million dollars and handled 247,800 head of live stock including 71,900 cattle, 19,400 calves, 85,300 hogs and 71,094 sheep. In spite of the fact that there had been a decrease of 68,300 in the number of head of live stock passed through the yards in that year the United Farmers showed an increase of 26,300 head over the amount handled in 1919, their share of the business done in the yards at Toronto and Montreal being about one quarter of the total. The profit of the company at the Montreal Stock Yards in 1920 amounted to \$742; these yards, however, were only used by the company for a few months. At the Union Stock Yards, the profits made in 1920 and 1921 were \$21,707 and \$17,419 respectively.

The United Farmers' Co-operative Company of Ontario has other activities to which we shall have occasion to refer. The shareholders number 19,000. The management of the company is in the hands of a board of directors, about 35 in number, chosen at the annual meetings by representatives of the shareholders who are grouped by ridings. The company has grown rapidly of late years; in 1914 the turnover was \$33,000; in 1915, \$226,000; in 1916, \$410,385; in 1917, \$918,197; in 1918, \$1,765,378; in 1919, \$8,500,000; and in 1920, \$19,500,000. In 1921 the company suffered a gross loss of \$388,597; of this loss \$159,499 was in trading. However, all departments did not suffer a loss; the head office made a trading profit of \$4,433, the West Toronto Live Stock Branch a profit of \$17,419 and the Toronto Creamery \$31,222. In 1920 the profits amounted to \$57,176 out of which a dividend of 7 per cent. was declared, but no patronage dividend was paid. In 1921 no dividend at all was paid. The company's authorized capital is \$1,250,000 and the subscribed capital is \$1,195,150 of which \$871,406 is paid up.

The co-operative live stock shippers of Grey County have departed somewhat from the usual method of receiving their returns from the company. The returns are divided between the individual owners of the

stock by the company's agency at the Toronto stock yards and the amount due is paid into the bank in Grey County. The bank then issues cheques to the members, deducting for the association the percentage decided upon for the reserve fund.

Saskatchewan.

The first step towards the organization of co-operative marketing of live stock in Saskatchewan was taken by the Provincial Department of Agriculture which published a bulletin in 1913 explaining the method of co-operative marketing and the benefits to be obtained therefrom. As a result nine incorporated co-operative stock marketing associations were organized in 1914 and this number had increased to 54 by 1920, exclusive of the unincorporated locals of the Saskatchewan Grain Growers' Association. The rules and regulations of the Saskatchewan stock marketing associations are similar to those adopted in the Province of Ontario.

In Table III are shown the number of registered associations marketing stock and the quantity sold from 1914 to 1920.

TABLE III. — *Number of Registered Live Stock Marketing Associations in Saskatchewan and Quantity of Stock Sold, 1914 to 1920.*

Year	Number of associations	Live stock	
		Number of cars	Value
			\$
1914	9	30	42,034
1915	10	140	150,513
1916	23	241	323,171
1917	35	548	1,050,285
1918	50	750	1,432,000
1919	54	784	1,576,083
1920	54	912	1,429,309

In 1921 the number of associations increased to 60; in addition there are several unincorporated groups which employ the same methods.

In Table IV (page 495) are summarized special reports from 11 typical associations in 1919.

From this table it will be seen that an average saving of 73 cents per pound was realized by marketing co-operatively.

A few years ago the attention of the Co-operative Organization Branch of the Saskatchewan Department of Agriculture was drawn to the fact that several associations were making a practice of sending a new man down to market with each consignment, shareholders frequently taking turns in accompanying shipments. The Branch pointed out that this

TABLE IV. — *Summary of Special Reports of Eleven Typical Co-operative Live Stock Marketing Associations in the Province of Saskatchewan, 1918.*

Name	Number of cars	Number of shippers	Weight	Saving per lb.	Amount saved
			lbs.	cents	\$
Dubec Grain Growers' Association, Limited	6	—	110,200	1/2	551
Grenfell Grain Growers' Association, Limited	1	—	18,380	1	184
Guernsey Co-operative Association, Limited	8	17	148,210	1	1,482
Levan Grain Growers' Association, Limited.	4	38	73,590	3/4	552
Recanville Grain Growers' Association, Limited.	10	90	175,740	1 1/2	2,636
Rozlee Co-operative Association, Limited.	29	580	559,221	3/8	3,495
Speers Grain Growers' Association, Limited	5	42	105,845	1 1/2	1,588
Wauchope Grain Growers' Association, Limited.	2	7	35,440	1/4	89
Welwyn Grain Growers' Association, Limited	8	—	136,670	1	1,367
Wilton Co-operative Trading Association, Limited.	68	200	1,371,240	1/2	6,856
Young Grain Growers' Association, Limited.	18	—	197,220	1 1/2	2,958
	159	—	2,931,765	—	21,758

practice, if continued, would seriously interfere with the success of the associations, for the reason that in many cases the parties accompanying the stock would look upon the marketing of the whole consignment as a secondary consideration, their personal business at the market being of greater importance, and that consequently the stock would be neglected in transit and sold to poor advantage. For the greatest success it is necessary that the same party should accompany every shipment so as to become familiar with the markets and experienced in the business.

To encourage the organization of live stock marketing the Co-operative Organization Branch supplies each new association free of charge with a set of receipt and account forms, sufficient to record their marketing for one year, together with a bulletin explaining how the accounts should be kept.

At the 1918-19 session of the Provincial Legislature, following the report of a Royal Commission on the marketing of live stock and live stock products in Saskatchewan, steps were taken to establish two incorporated central live stock markets at Moose Jaw and Prince Albert. The capital stock of each of these companies was originally placed at \$100,000, divided into \$100 shares, with the proviso that half the stock must be held by agriculturists. The legislation further provided that as soon as \$60,000 worth of stock had been subscribed and half of that amount paid up, the shareholders might meet and elect their directors and commence business.

Dividends were not to exceed 8 per cent. on the paid up capital, and profits in excess of this amount were to be put in a stock yards reserve account. One third of the cost of the buildings erected at each of the yards was to be paid by the government on evidence that the company possessed enough paid up capital to furnish the other two thirds.

The real and personal property was made exempt from taxation for municipal or provincial purposes for a period of five years, dating from 1 January 1920.

The report of the Southern Saskatchewan Co-operative Stock Yards, Moose Jaw, for the year ending 30 April 1920, the first year of operation, stated that a very favourable market for cattle, hogs and sheep had already been established, and in addition to this an active horse market had been created and a number of successful auction sales of horses had been held at the yards. To accommodate this department, additional stabling for 65 head of horses, and a comfortable, commodious, heated and covered sale ring were to be built in the summer of 1920.

By the original charter the amount of stock was fixed at \$100,000, but very soon the directors realizing the possibilities of extension, asked the government to increase the stock to \$300,000, and this increase was authorized.

During the five months ending 30 April 1920 — the first five months of their operations — these yards handled 486 cars containing 5,667 cattle, 122 calves, 12,334 hogs, 2,680 sheep and 2,087 horses. Of this quantity of stock the greater amount was marketed within the province, the local abattoirs providing a ready market.

In addition to accommodation for horses, the selling of which we mention below, the company proposes to build a dipping vat, a hay shed, and additional chutes and trackage for loading and unloading.

The Northern Saskatchewan Co-operative Stock Yards, Ltd., at Prince Albert, erected its exchange building and stock yards in the summer of 1919, the area covered being 51½ acres of land. The yards are admirably located with respect to railway service. The construction of the yards is modern in every detail, and at present provide accommodation in covered and open pens for 100 cars of stock. In addition to these pens there is a sales barn that will stable 80 head of live stock, and a sales pavilion 100 feet long and 50 feet broad.

The supply of live stock is greater than the local demand, and considerable livestock is shipped to Vancouver and eastern and southern points.

The total value of live stock passing through the Northern and the Southern Saskatchewan Co-operative Stock Yards during the year ending 30 April 1921 was \$7,380,000.

With a view to finding a profitable home market for surplus farm horses the Saskatchewan Department of Agriculture arranged, in 1919, a series of co-operative horse sales. The sales were arranged in circuits, the arrangements for the sales being in the hands of the local agricultural society at the point where the sale was to be held. Either the sales took

the form of auctions, all animals for sale being listed with the secretary of the society and sold for cash or on such terms as the society's directors considered advisable, settlements being made through the secretary, or farmers having horses for sale could bring their animals to the town and deal privately with the buyers in attendance.

Quebec.

Several of the sheep breeders' and wool producers' co-operative associations in the Province of Quebec sell sheep co-operatively, their managing secretaries often being the agricultural representatives of the Department of Agriculture.

Sheep are sold by auction on the county fair ground or in other centres convenient to the members of the associations, or are shipped by carloads to the Montreal market. They are graded as follows at the various loading points and sold as such:

Lambs	Sheep
Nº 1 — 70 to 100 lbs.	Nº 1 — 100 to 140 lbs.
Nº 2 — 100 lbs. and more.	Nº 2 — 140 lbs. and more.
Nº 3 — 70 lbs. and less.	Nº 3 — 100 lbs. and less.
Ram lambs, all weights.	Rams, all weights.

Each farmer is handed by the manager a weighing and grading certificate for the animals offered for sale. The grading is done in the presence of the farmers. This system has the advantage of encouraging the farmers to finish their sheep better before placing them on the market.

The associations charge from 8 to 10 cents for each sheep sold. When shipments are made to the Montreal market, the farmer receives 1 ½ to 2 cents less per pound as there must be deducted from the selling price the commission paid to the selling agent, the cost of freight and the shrinkage in weight during transit.

The total value of sheep sold by six of these associations in 1918 amounted to \$36,545. Through these co-operative sales the farmers have received from 1 to 2 cents more per pound than through the local buyers.

Apart from the sheep-breeders' associations there was practically no organization for the sale of live stock in the Province of Quebec before 1918. In order to improve matters in this connection the Quebec Farmers' Central Co-operative Association (or as it was then called, the Quebec Cheese-makers' Agricultural Co-operative Association) (1), began to grade and sell for its members, by carloads only, all kinds of live stock.

(1) The name of this association was changed in 1920 when it largely increased the scope of its operations. It was organized in 1910, by the Quebec Dairy Society, and as the original name implies, it first started as a co-operative cheese-making association.

The live stock shipments are made from the localities where the local associations are operating or from the co-operative slaughter houses of St. Valier or Princeville managed by the Association. All the animals are weighed and numbered at the loading points, and a copy of the weigh sheet with the bill of lading is forwarded by mail to the Association. The numbering of the animals makes the work of grading easier. The owner receives the amount due to him as well as a grading certificate, containing valuable information as to the defects noted and the way to correct such defects.

A charge of 2 1/2 % is made on the sale of live animals in carloads, which includes in addition to shipment expenses, food given in Montreal and insurance.

During 1918 the Association handled about 125 carloads of animals of all kinds, i. e. 6,900 head. The total amount realized by the sales was \$152,951.

The Maritime Provinces.

In the spring of 1919, in order to introduce co-operative live stock marketing in the Maritime Provinces of Canada, viz. Nova Scotia, New Brunswick and Prince Edward Island, the Dominion Department of Agriculture demonstrated the benefits of this type of marketing by entering into an agreement with the farmers of a district near Bathurst, New Brunswick, to prepare and arrange for the co-operative sale of their sheep on the open market in the autumn of that year. The first shipment dealt with was 26 1/2 carloads of lambs and sheep and very good results were obtained from the sale. In 1920 the scope of this work was enlarged to include cattle and hogs.

In many cases new organizations had to be formed, but wherever there was a society, club or any farmers' organization suitable to handle the work, advantage was taken of it. Farmers accompanied every shipment — one man to every three or four cars — and many have now sufficient knowledge to take over this work from the Government. All stock was sold according to grade, and the receipts, after all expenses were deducted, were sent to the secretaries of the local shipping associations, together with a statement giving details showing the amount due to each consignor. No money whatever was handled by the Department officials; they rendered assistance and directed the movement.

Table V (page 499) gives details of co-operative live stock marketing in the Maritime Provinces in 1920.

The United Grain Growers' Live Stock Department and Cattle Pool.

Tables VI and VII (pages 499 and 500) show the total number of cars handled by the live stock department of the United Grain Growers, Limited, at the various stock yards during the year ended 31 August 1920 and the composition of the cars in the two years 1918-19 and 1919-20.

TABLE V. — *Co-operative Live Stock Marketing*
in the Maritime Provinces, 1920.

	Number of cars	Total number of head	Revenue
Sheep:			\$
Nova Scotia	19 $\frac{3}{4}$	5,260	36,416
New Brunswick	55 $\frac{1}{2}$	4,607	39,416
Prince Edward Island	49 $\frac{3}{4}$	1,791	14,711
Total . . .	125	11,667	90,543
Hogs:			
New Brunswick	$\frac{1}{2}$	29	1,320
Prince Edward Island	21 $\frac{1}{2}$	1,398	44,058
Total . . .	22	1,427	45,378
Cattle:			
Nova Scotia	24 $\frac{1}{2}$	784	22,148
New Brunswick	22 $\frac{1}{2}$	651	21,117
Prince Edward Island	6	152	5,839
Total . . .	53	1,587	49,104
Total live stock . . .	200	14,681	185,025

TABLE VI. — *Live Stock handled by the Live Stock Department*
of the United Grain Growers, Limited, 1918.

	Carrloads handled on consignment	Carrloads of stockers and feeders bought on order	Total carrloads
Calgary	1,463	167	1,630
Edmonton	960	19	979
Winnipeg	2,510	402	2,912
Moose Jaw	93	—	93
Prince Albert	38	2	40
Total . . .	5,064	590	5,654

TABLE VII. — *Composition of the Cars of Live Stock handled by the Live Stock Department of the United Grain Growers, Limited, in 1918-19 and 1919-20.*

	1918-19	1919-20	Increase (+) or decrease (-)
Cargos handled	5,257	5,654	+ 397
No. of cattle	77,968	103,624	+ 25,656
No. of hogs	108,966	53,219	- 55,747
No. of sheep	12,681	18,605	+ 5,924
	\$	\$	\$
Revenue	90,594	109,444	+ 18,850
Expenses	91,671	92,056	+ 385
Net profit or loss	1,077 (loss)	17,388 (profit)	+ 18,465

The offices at Moose Jaw and Prince Albert were opened during the year 1919-1920.

In the middle of 1921 a director and the treasurer of the United Grain Growers, Limited, visited Great Britain to study the live stock marketing conditions. Their report stated that, first, the chilled meat industry did not provide a safe and satisfactory means of exporting the surplus live stock from Western Canada; secondly, the removal of the British Embargo against Canadian cattle could not be looked for in time to assist Canadian producers in the disposal of their stock, and thirdly, any permanent scheme for shipping live cattle would require to be of a co-operative nature.

The report went on to say that the best solution seemed to be the formation of a cattle export company, but that this could not be formed in time for the 1921 season.

In consequence, an export cattle pool was formed by the United Grain Growers. The proposal was for shippers at country points to send co-operative shipments collected and shipped in the usual manner and sent to the United Grain Growers, Ltd., at Montreal.

The accepted cattle would be graded at Montreal and initial cash payment made as follows: Nos. 1, 2, and 3 steers, 4, 3½ and 3 cents per pound respectively, heifers 3 cents per pound, cows 2½ cents and bulls 2 cents per pound. After grading and payment, shippers would be given participation certificates. These certificates would indicate the weight and quality supplied by the individual to whom the certificate is issued and the amount of cash advance made. The participation certificate issued by the company would not be negotiable.

From the time the cattle were graded the identity of the individual contribution would be lost. Steers, heifers, cows and bulls would be separately pooled. In each pool the gross selling price, minus cash ad-

ances and expenses, would be divided equally amongst contributors to that particular pool on the basis of live weight supplied. In the case of steers the second payment would be the same for all three grades, the difference having been adjusted in the advance payment.

§ 4. CO-OPERATIVE DAIRYING.

Dairying is one of the oldest and has now become one of the most important of the industries of Canada. Co-operative dairy companies have been in operation for many years but it is only recently that the movement has become important. In the following table we give a classification of butter and cheese factories in Canada according to their character of organization.

TABLE VIII. — *Butter and Cheese Factories in Canada, Classified according to Character of Organization, 1920.*

Province	Co-operative and partnerships	Individuals and partnerships	Incorporated companies	Total factories
Quebec	223	1,551	34	1,808
Ontario	189	650	198	1,037
Prince Edward Island	23	1	12	36
Saskatchewan	22	12	13	47
Alberta	13	9	33	55
British Columbia	12	6	13	31
New Brunswick	11	16	11	38
Manitoba	9	17	31	57
Nova Scotia	7	8	9	24
Canada	509	2,270	354	3,133

Quebec.

A large amount of the co-operative dairying in Quebec is in the hands of the Quebec Farmers' Central Co-operative Association, which, as we have already noted was organized in 1910 by the Quebec Dairy Society, under the name of the Quebec Cheesemakers' Agricultural Co-operative Association. The present name was adopted in 1920 when the association greatly increased the scope of its operations.

At the start the membership was 30 and it has increased rapidly, the number in 1919 being 7,885. For the first year only cheese was handled but in the second year butter was included and from year to year various new items were added, the annual turnover of the company now being about 10 million dollars. Besides dairy products, the association handles

poultry, eggs, live stock, dressed meats, game, wool, vegetables, honey, maple sugar and maple syrup (these last two for the Pure Maple Sugar and Syrup Farmers' Co-operative (1) and other similar associations as well as for individual members) and farm requisites.

The Association has an authorized capital of \$1,000,000 divided into shares of \$10 each. No more than two thousand dollars may be subscribed by any one member. The Association has decided that no subscription of less than five shares will be accepted. The Association may purchase and sell, on commission or otherwise, import, export, manufacture agricultural products and bye-products, manufacture agricultural implements and their parts, and chemical fertilizers, and do a retail and wholesale trade in these products. In addition it may purchase any association or company having in whole or in part identical objects or powers. However, such power may only be exercised with the authorization of the Minister of Agriculture. Whereas other co-operative associations are not allowed to borrow more than four times the amount of their subscribed capital stock, plus the reserve fund, this limit has been removed in the case of the Quebec Farmers' Central Co-operative Association. This privilege will enable the Association largely to extend its export trade. At least ten per cent. of the net profits made during the year must be put in the reserve fund; the dividends paid to the shareholders must not exceed ten per cent. of the paid up capital; and if still a there is a surplus, it must be allocated to the reserve fund.

All the transactions of the Association are under the supervision of the Minister of Agriculture, who may ask for all the information that he deems necessary; the Minister may take part at meetings of directors, he has the privilege of appointing the auditor of the accounts of the association and may require that the products be graded by graders appointed by him if the interests of agriculture so require.

In 1920 the company handled, for 600 local factories, co-operative and otherwise, 108,823 boxes of butter, of which 24,667 boxes were pasteurized, 63,386 were Number 1 grade and 20,770 were Number 2 grade. The amount of cheese sold was 199,658 boxes. The sales of butter showed an increase of 22,169 boxes and of cheese, an increase of 7,911 boxes over 1919. Much of the cheese sold by the company was exported to England. The average quantity of cheese handled by the company during about 26 weeks of the shipping season was 7,500 boxes per week.

In the table IX (page 503) is shown the effect of the company's grading system upon the quality of the butter and cheese handled.

Butter is graded according to the following scale: Number 1, from 100 down to 95 points; Number 2, 94 to 92 points; Number 3, below 92 points. Cheese is graded on similar lines: Special, 100 down to 94 points, minimum for flavour, 41 points; Number 1, 93 to 92 points, minimum for flavour, 39 points; Number 2, 91 to 87 points, minimum for flavour, 37 points. Both these gradings are according to Government standards.

(1) This association was organized in 1913 and now has over four hundred members.

TABLE IX. — *Effect of Grading upon Quality of Butter and Cheese handled by the Quebec Farmers' Central Co-operative Association in 1911 and 1920.*

Grade	Pasteurized (butter) Special (cheese)	No		
		1	2	3
	%	%	%	%
Butter	1911	—	49.2	6.8
	1920	80.91	19.09	—
Cheese	1911	—	26.7	27.5
	1920	79.47	20.53	—

Ontario.

The co-operative sale of dairy products in Ontario is chiefly undertaken by the United Dairymen Co-operative, Limited, which acts as the central selling agency for its patrons, either individuals or creameries or cheese factories whether co-operative or otherwise.

However, before dealing with the main association, we give the following typical example of the formation of a local co-operative creamery in Ontario. In 1917 the Ontario Department of Agriculture established a creamery at New Liskeard. In preparation for this a canvass was made of the farmers of the district when over eighty of them signed an agreement to send their cream to the creamery to be manufactured into butter. The Department secured the services of a competent butter maker who manufactured the butter for the patrons at a charge of $3\frac{1}{2}$ cents per pound until the factory became self-supporting. When that time arrived the farmers took it over at first cost, in accordance with an agreement originally made. At the start there were 325 cows in the district to supply the cream, and this number being small the Department made plans to purchase several carloads of cows and sell them at auction at New Liskeard.

The United Dairymen Co-operative, Limited, formed in 1920 is responsible for most of the co-operative sale of cheese and a large part of the co-operative sale of butter in Ontario. The shareholders of the company, who at 30 November 1921 numbered about 450, are organized into county locals and all matters relating to the dairy interests in those counties are referred to the interested locals for consideration. Officers of the central company attend the annual meetings of the local companies and submit to them the reports which are later to be submitted at the annual meeting of the central organization. Each county local appoints one representative to attend the annual meeting of the association. Any shareholder of the association who desires is free to attend this meeting and to take part in the discussions, but only the appointed representatives of the county locals are permitted to vote.

At first the company met with strenuous opposition from the local dealers and other interested persons, but it is becoming more and more the central selling agency for local cheese factories and other dairy enterprises, whether co-operative or otherwise.

Only 13 factories sold their cheese through the company at its first sale held in Montreal in June 1920 and the amount of cheese sold was 691 boxes. During the season of that year the number steadily grew until as many as 52 factories were selling through the central during the same week. Between 1 June and 30 November 1920 the sales of the company exceeded one million dollars. Of this sum \$979,000 represented sales of cheese and \$28,200 sales of butter. During the next season between 4,000 and 5,000 boxes of cheese and butter were sold. In one week the company dealt with the produce of 103 factories, and up to the end of August 1921 the total sales amounted to \$1,039,000. During the first eighteen months of operation the total sales of the association amounted to \$2,275,000, the second season's sales showing an increase of 133 % over those of 1920. The cost of selling cheese averaged $\frac{1}{17}$ cent per pound. A dividend of 8 % was declared, and \$600 of the surplus profit was used to reduce the organization expenses account.

The United Farmers' Co-operative Company of Ontario, whose activities are dealt with in various sections of this article, own a creamery at Toronto which handled over one million pounds of butter in 1920 and made a profit of \$14,910. In 1921 the profit made was \$31,222.

Prince Edward Island.

Co-operative dairying in Prince Edward Island was started in 1891 when the then Dominion Commissioner of Dairying visited the island. On behalf of the Dominion Government he offered to supply the plant and operate a factory at a fixed charge and to market the butter and cheese. The farmers themselves were to erect the necessary buildings. The success of this factory soon led to the formation of other co-operatively run factories. The stock shares were generally \$10 and were nearly all held by patrons, the majority of patrons holding only one share. In 1920 there were twenty-three co-operative creameries and cheese factories in operation.

Saskatchewan

The first co-operative dairy enterprises launched in Saskatchewan were three co-operative creameries established in 1896. For several years little progress was made but as the country developed more interest was taken in dairying and when, in 1905, the Province was granted autonomy the progress of co-operation became marked. Following the establishment of the Dairy Branch of the Saskatchewan Department of Agriculture in 1907 an arrangement was made whereby all the co-operative creameries

voluntarily placed themselves under the supervision and direction of the Provincial Dairy Commissioner. By this arrangement the Dairy Branch engaged the managers, purchased all supplies, kept the accounts, marketed the produce and paid the patrons.

The following table gives data concerning the progress of co-operative dairying in Saskatchewan from 1907 to 1917 inclusive.

TABLE X. — *Progress made from 1907 to 1917 by Co-operative Creameries in Saskatchewan.*

Year	Number of creameries	Number of patrons	Pounds of butter	Gross value \$
1907	4	213	66,246	16,069
1908	5	553	220,282	53,177
1909	6	876	324,404	80,286
1910	7	1,166	462,221	112,275
1911	9	1,596	703,583	168,040
1912	10	1,755	649,958	179,184
1913	11	2,681	850,525	229,406
1914	13	3,625	1,398,730	249,937
1915	15	5,979	2,012,401	558,010
1916	17	7,205	2,538,061	771,092
1917	19	8,126	2,482,400	996,152

In 1917 a central co-operative dairy company was organized under the name of the Saskatchewan Co-operative Creameries, Limited, with its head office at Regina. The company has an authorized capital of \$1,000,000, divided into \$20 shares, of which \$750,000 has been subscribed and \$350,000 paid up. In addition the company possesses fixed assets of about one million dollars. The number of shareholders is about 4,500.

In addition to its own big combined factory and headquarters the company operates 24 local creameries, 5 public cold storage plants and three poultry killing stations in various parts of the Province. In all the company has about 19,000 patrons. For the year ending 30 April 1918 the value of the products marketed by the company amounted to \$1,700,000, in 1919 they totalled \$2,500,000, in 1920 the turnover was \$3,000,000, and in 1921, in spite of a very bad season for the farmers, the business done was \$3,500,000. In 1920 the company manufactured nearly three million pounds of butter, supplied Regina with most of its milk and cream, sold 161,000 gallons of ice cream and graded and marketed over 50 carloads of eggs and several carloads of poultry.

In 1919, in addition to paying its shareholders a dividend of 8 per cent., the company paid a bonus of 2 cents a pound on all butter fat; this amounted to \$50,000. Bonuses were also paid on eggs and poultry. The

company was the first of the kind to pay patronage dividends in Canada in addition to its dividends on stock. In 1920, owing to the drop in the price of butter, no patronage dividend was paid.

In 1919 the directors voted a bonus of 8 per cent. on the salary paid to each member of the staff, thus adopting the principle of paying the same percentage on salaries as upon paid up capital. Bonuses under \$100 are paid in cash, from \$100 to \$200 half cash and half stock in the company, over \$200 one-third cash and two-thirds stock in the company.

Alberta.

There are about 53 co-operative creameries in Alberta, receiving cream according to grade and selling butter on the grades of the Dairy Commissioner of the Provincial Government. About a million pounds of creamery butter were produced by these creameries in 1919. If desired, the Butter Marketing Service of the Provincial Department of Agriculture will act as a central selling agency for the creameries, \$250,000 being allotted to this Department with which to make advances on butter sold. This is generally done to the amount of 80 per cent.

In 1920 the milk producers shipping to the Calgary market organized themselves into the Calgary District Milk Producers' Association. A president and vice-president were elected and a board of twelve directors appointed. The initial membership numbered eighty.

In 1921, starting with the Calgary District Milk Producers' Association, a movement was put under way for the formation of pools on similar lines to the grain pool, for the marketing of the dairy produce of Alberta. The movement got its first real start when the Calgary distributors refused to assume more than 25% of the loss in a drop in milk prices. An agreement has been drawn up by which the producers bind themselves to sell all of the milk and dairy products they produce through the Association (excepting only such as may be required for home use), to deliver these products as may be ordered by the Association, and not to sell or deliver any of their dairy products at prices in excess of the price then paid by the Association. The producers also agree to pay a penalty should they break their contract with the Association.

Similar associations to the Calgary District Milk Producers' Association exist at Olds and Didsbury. These associations have now joined the Calgary Association milk pool under the terms of the aforementioned agreement.

British Columbia.

Local co-operative dairy associations have been in existence in British Columbia for several years, chiefly amongst the farmers centred round Vancouver, New Westminster and Victoria. These local associations are operating under the Agricultural Associations Act. At first most

of them were aided by small loans from the Department of Agriculture. Some of the local creameries, such as the Comox Creamery Association Ltd., the Northern Okanagan Creamery Association, Ltd., and the Salmon Arm Creamery Association, Ltd., are concerned only with the manufacture of butter, which is sold either direct to the retail trade or through some reliable commission house. On the other hand the Cowichan Creamery Association, Ltd., has for several years carried on a co-operative business in butter, eggs, poultry, flour and mill feeds, fruit and vegetables. The association also possesses an elevating plant which includes equipment for cleaning, crushing, grinding and mixing grain.

The Fraser Valley Milk Producers' Association was incorporated in 1913. It has an authorized capital of \$1,000,000, of which \$500,000 have been paid up. The shares are \$10 each, but not less than \$100 in stock is sold to a shareholder nor may he hold more than \$3,000 of stock. There are 1,500 shareholders. Shareholders subscribe for stock in proportion to the number of cans which they deliver per day; they are expected to take \$200 of stock per can. At first the amount of interest which could be paid was limited to 6 %, but 8 % is now the maximum. During the first three years of the War the organization of the company was held in abeyance, but since then the Association has made great strides. The Association was the first in Canada to work under a pooling agreement with the milk producers by which the producers are bound to sell their produce only through the Association. The first agreements ran for a period of one year and proved very successful; the next ran for three years, subject to 12 month's notice of withdrawal by either party. The present agreement, which is based on similar contracts in force in New Zealand, California, Denmark and other countries, runs for an indefinite period, subject to a year's notice of termination of contract as in the previous agreements. Between 90 and 95 per cent. of the producers in the Fraser Valley have signed this agreement. Under the terms of the contract the producers agree to forward to the Association all milk and cream produced by them, except what is required for their personal or family use, and to endeavour to follow the instructions of the Association in regard to the proportionate quantities of milk to be produced during the several months of the year in order that the natural surplus in the spring may be reduced as much as possible. The producers agree to deliver the milk and cream to such plant or place as the Association may designate and to be responsible for its condition until its delivery.

The Association agrees to receive all the milk and cream delivered by the producers, to sell it and to pool the proceeds and to divide them amongst the producers on the basis of the butter fat content f. o. b. Vancouver, reducing the price where the costs of delivery are less than the costs of delivery at Vancouver by an equitable difference. It is agreed that the price paid should be based on the market prices obtained for sour cream, sweet cream and whole milk, less such amounts as may be deducted for the purposes of the Association, these amounts not to exceed 10 per cent. of the sums realized for the sale of the milk and cream.

The producers also agree that if they fail to deliver their milk and cream through the Association they will pay to the Association 20 cents for each pound of butter fat not delivered.

The directors are authorized to retain from these funds such amounts as they may deem advisable for the purpose of purchasing land, buildings, machinery or equipment, or for any other investment which they may deem to be of benefit to the Association, it being provided that such expenditure shall not exceed 2 1/2 % of the total amount realized from all sales of milk and cream during the year, unless authorized to do so by a special general meeting of the Association. The Association make semi-monthly settlements with the producers.

In time the Association found it necessary to make provision for the handling of their surplus milk, and in 1917 they entered into an agreement with some of the dealers whereby the dealers were to buy all their milk, wholesale, from the Association. In 1919 the Association decided to enter the retail trade and it purchased the controlling interest in a large dairy company in Vancouver which handles 70 % of the milk trade in that city, having about 20,000 customers. This company is capitalized at \$300,000 of which the farmers own \$240,000. The manager of the company holds the balance of the share capital; he is also a member of the board of five directors, the other four being members of the Association. In addition to the main plant the company owns a creamery and an ice-cream plant in Vancouver which are used to handle the surplus milk. This creamery makes about 1,000,000 pounds of butter annually which is sold locally, the skimmed milk being also sold as such or made into casein. The Association also owns a receiving station at Clayburn, 40 miles from Vancouver and another receiving station and a cheese factory at Chilliwack which turns out 300,000 pounds of cheese a year. A milk condensery was built in 1920 by the Association at Abbotsford, about 45 miles from Vancouver and an arrangement made with the Pacific Milk Company, Ltd., to instal the machinery and to operate the plant. The contract, which runs for 5 years, provides that the Pacific Milk Company will buy all its milk from the Association, pay all carrying charges, make an allowance for depreciation and pay 7 % on the money invested by the farmers in the plant. The company handles about 40,000 pounds of milk a day, and is operated for two-thirds of the year. The company also owns a plant of its own for which it buys its milk from the Association on the usual basis.

A milk powder company has also entered into a five year agreement with the Association to buy all its milk from the Association.

The turnover of the Association through the sale of milk wholesale is about \$2,700,000 and of butter and milk retail in the cities about \$2,500,000.

In 1919 the Vancouver Island Milk Producers' Association, who supply milk and cream for the city of Victoria formed a pool similar to that of the Fraser Valley Milk Producers' Association. In addition to the clause binding the patrons to supply their products only to the Association, the Association has entered into an agreement with the dealers

by which it will not sell retail nor will the dealers buy outside the Association during the life of the agreement. This clause, however does not cover surplus milk whether made into butter, cheese or ice-cream. The Association owns a creamery in the city of Victoria in which it manufactures its own surplus.

The capital of the Association is divided into \$10 shares and each member must hold at least five. Today the amount of capital is over \$350,000. Ten per cent of the paid up capital goes into a "redemption fund," out of which at any time any member who is retiring from dairying may receive the full value for his shares, which he returns to the Association, plus six per cent. interest on his money. This fund was started mainly for tenant farmers, of whom there are a fairly large number amongst the dairy-men and who might at any time be obliged to sell out. It has been an important factor in obtaining the support of these men. Up to the present time, however, there has been enough demand for stock from prospective new shareholders to redeem all the shares handed in without drawing upon the redemption fund.

From the first the Association had to handle 300 gallons a day of milk as surplus; this rose to 850 gallons a day at the height of the season in 1919 and averaged for the year 350 gallons a day. The number of producers who first joined the pool was 75; the number now is about 240. The association handles an average of 4,500 gallons per day and has a turnover of from \$30,000 to \$35,000 a month. Members are paid the average received from that portion of their milk sold in the city and of the price received for the surplus which is sold as butter, less operating expenses, which average about 4 1/2 cents per pound.

It should be pointed out here that while the farmers belonging both to the Fraser Valley and the Vancouver Island Milk Producers' Associations have made a success so far of their milk pools their conditions are not the same as prevail in most other sections of Canada. The cities of Vancouver and New Westminster are practically dependent upon the comparatively small number of farmers in the Fraser Valley for their milk and cream. This has made it easier for these farmers to organize than would otherwise have been the case. A somewhat similar condition exists around the city of Victoria. Milk could not very well be brought from the mainland, or from the State of Washington in the south. This leaves the city of Victoria dependent upon the milk producers adjoining the city. In the remainder of the milk producing sections of Canada the production of milk is greater and it is possible for opposition dealers to buy and ship from long distances.

New Brunswick.

Marked progress has been made in the dairy industry of New Brunswick during the past few years, the tendency in co-operative dairying being to form central co-operative creameries covering large districts.

The Farmers' Co-operative Creamery Company at Monkton is a case in point. This co-operative dairy association was started in 1918; in that year the number of patrons supplying cream was 300; they increased to 602 in 1919 and to 990 in 1920. In 1918 the amount paid to patrons was \$37,735 and \$144,761 in 1919. In 1920 it became necessary to enlarge the whole plant, which includes an ice-cream factory, in order to accommodate the volume of business. In addition a chemical storage plant is being installed. Another company, the Sussex Cheese and Butter Company have found it necessary to instal two 400-gallon pasteurizers. At the Madawaska Creamery at St. Hilaire, under the control of the provincial Department of Agriculture, the output is gratifying. As soon as conditions permit, another central creamery will be organized in Gloucester county. With the establishment of these large central creameries the dairy industry of the province will soon be placed on a sound basis.

Manitoba.

There are comparatively few dairy farmers in Manitoba and although there were several co-operative creameries in the province previous to 1920, they were very loosely knit. Consolidation started in that year when the farmers who supply Winnipeg with its milk and cream formed the Winnipeg Milk Producers' Association. This association was similar to other associations of the kind that exist around Montreal, Toronto, Ottawa and other consuming centres. The object of the Association was to organize the producers and thereby enable them to negotiate more effectively with the dealers in settling prices to be paid for milk and cream. The Winnipeg Milk Producers' Association met with all the usual difficulties of starting, and in addition climatic conditions are not as favourable in Manitoba for the production of milk as they are in Ontario or British Columbia. Cattle have to be stabled from about 15 October to 24 May, and there is lack of cheap natural pastures. This makes the production of cream an expensive matter. Moreover owing to the small number of dairy farms the supply of milk and cream required by the city of Winnipeg has to be obtained from a wider area than would otherwise be the case. This makes it correspondingly more difficult and expensive to organize the producers. The difficulty is heightened by the fact that a considerable number of the the farmers produce milk for only a short period each year and as dairying is not one of their main sources of income it is harder to interest them in a milk producers' association. There is also the usual difficulty in obtaining capital.

The first move on the part of the new association took the form of an appeal to the city for a joint council composed of producers, consumers and distributors which would fix fair prices. The appeal was, however, unavailing. Shortly after this the Board of Commerce commenced holding sittings in Winnipeg and ordered the reduction in the retail price of milk. This time the Association was successful in preventing the dealers from

passing on the reduction to the producers. However, after the expiry of the order of the Board, conditions were as bad as before.

In the Autumn of 1920 the members of the Winnipeg Milk Producers' Association came to the conclusion that they would only become fully effective when incorporated as a commercial company. It was decided, therefore, to form a co-operative company, capitalized at \$500,000, and to purchase the second largest dairy plant in Winnipeg. It was also decided to develop the Association along the lines of the Saskatchewan Co-operative Creameries, Limited. In the city of Winnipeg 40 per cent. of the milk trade is handled by a large non-co-operative company, 40 per cent. by small dealers and 20 per cent. by the City Dairy Company. On this last the farmers secured an option for \$250,000. The association then applied to the Government for a loan of 75 per cent. of the costs of the plant required, but the Government would only make a loan of 50 per cent. Therefore the option on the City Dairy Company's plant was allowed to expire.

Owing to the great drop in the price of farm products which occurred in the autumn of 1920, the campaign to sell stock was not very successful, only about \$70,000 of stock being sold. Therefore the association bought a creamery which is capable of manufacturing 400,000 pounds of butter per year and by the addition of some extra equipment could manufacture 1,000,000 lbs. a year. It is the intention of the directors to build up the present business of the creamery and to link up the outlying creameries by inducing them to join the company as rapidly as possible. There are about 12 small creameries, mostly owned by farmers on the co-operative basis, which it was decided should be approached with that object in view.

The charter of the company gives it power to produce, purchase and sell fresh milk and all the products of milk; to manufacture, sell and otherwise deal in condensed, preserved and evaporated milk, and all other forms of manufactured milk. In addition to the foregoing, the company has very wide powers, which enable it to enter other lines of business, should such action be found advisable.

During the latter part of 1921, the United Farmers of Manitoba formed the Manitoba Co-operative Dairies, Limited. The Company was incorporated in that year and conforms to recognized co-operative practice.

Nova Scotia.

There were seven co-operative creameries and cheese factories in operation in Nova Scotia during 1920. They are all organized under the Nova Scotia Companies' Act. The Scotsburn Creamery, Pictou County, is an outstanding example of a co-operative creamery in the province; in fact it is the largest creamery in Nova Scotia, and the following table gives data concerning the Association from 1905 to 1921.

TABLE XI. — *Progress of the Scotsburn Creamery, Nova Scotia, from 1905 to 1921*

Year	Numbers of patrons	Amount of butter.	Net value of fat per pound to patrons	Value of butter made
		lb.	Cents	\$
1905	26	11,142	21.42	2,153
1906	32	13,307	21.73	2,867
1907	35	10,954	22.31	1,943
1908	38	16,122	24.22	2,401
1909	81	34,325	24.19	6,801
1910	204	107,715	24.40	22,146
1911	380	170,847	25.85	36,182
1912	423	181,614	30.14	44,788
1913	450	229,574	27.97	55,305
1914	502	277,672	28.07	65,678
1915	538	293,552	30.00	76,521
1916	592	327,715	34.25	97,077
1917	558	380,250	44.00	134,884
1918	632	388,621	52.00	164,488
1919	700	446,171	63.00	243,235
1920	947	609,860	71.00	371,820
1921	1,167	692,818	(1)	(2) 282,735

(1) Figure not available.

(2) A general decrease shown throughout the province.

§ 5. THE CO-OPERATIVE MARKETING OF WOOL.

The co-operative marketing of wool in Canada was started in 1914, and owes its growth almost entirely to the activity and initiative of the Dominion and Provincial Departments of Agriculture. In those early days the Departments supplied expert graders free of charge and undertook to act as central marketing agencies for any associations which might care to sell their wool in this manner. From the first the project was a success, 4 to 8 cents more per pound than prices offered to non-co-operative sellers being obtained. However it was not collective marketing only that brought improvement, but the education of the farmers in improving their flocks and wool and in grading and packing their produce for market. In 1917 a great step forward was made by the Dominion Government when it arranged for the proper storage in Toronto of the western wool clip and also negotiated with the banks for advances to wool growers.

In 1918 the aim of the Government was achieved when all the local associations scattered over Canada met together and formed their own central marketing association under the name of the Canadian Co-operative Wool Growers, Limited.

Information on co-operative wool marketing before 1918 is somewhat scattered, but we have put together all the available data in Table XII (page 614) from which a fairly comprehensive picture can be obtained of the growth of this branch of co-operation from 1914 to the time when the Canadian Co-operative Wool Growers was formed.

The report of the British Columbia Wool Growers' Association for 1921 explains the factors which go to make the total cost charged to their growers for the handling of the wool. Freight charges were the highest expense and cost the grower $3\frac{1}{2}$ cents per pound; the Canadian Co-operative Wool Growers charged 2 cents per pound for selling the wool; cost of grading was $\frac{1}{2}$ cent, and interest and assessment $\frac{3}{4}$ cent per pound; and the British Columbia Wool Growers' Association charged $\frac{3}{4}$ cent per pound, making a total of $7\frac{1}{2}$ cents per pound.

The Canadian Co-operative Wool Growers is the central selling agency for co-operative wool growing associations throughout Canada. It is in no sense a speculative agency nor does it retain any of the profits made over and above money required for working expenses and reserve fund. Toronto was chosen as the headquarters of the company, not only because of its superior position with regard to transport facilities leading to all parts of Canada, but also because of its proximity to the buyers of Great Britain and the United States. The company has also various warehouses and branches in the different provinces of Canada. The board of directors of the association numbers fifteen, of which at least one must come from every province and no province may have more than three directors. Five directors constitute a quorum. Every shareholder is eligible for nomination as a director.

For the annual or any special meetings every province having one or more shareholders is entitled to send delegates, but in no case must a province send more than thirty delegates. Moreover the board of directors allot to the provinces the number of delegates each may send. The annual meetings are held at Toronto in January or February of each year and at such meetings or special meetings ten delegate shareholders form a quorum. Throughout the company every member has only one vote regardless of the number of shares he holds. No shares may be jointly owned. The board of directors have the power to borrow money on the credit of the company and to issue bonds or debentures for any sum exceeding \$100. A reserve fund is provided for by setting aside one per cent. of the annual profits.

The company has an authorized capital of \$200,000, of which, in 1920, \$95,470 were subscribed and \$46,131 paid up. The shares are \$10 each.

The net surplus for 1920 amounted to \$14,812, of which amount \$2,630 was reserved for rebates to local associations; \$3,535 was distributed in bonuses to the executive and staff for the year 1920; \$3,647 as an 8 % dividend on paid up capital as at 30 September 1920; and \$5,000 was transferred to the general reserve.

At the 1920 annual meeting of the company it was shown to the share-

TABLE XII. — *Growth of Co-operative Wool Marketing in Canada from 1914 to 1917.*

Province	Year	Number of societies (1)	Member-ship	Amount of wool handled (lbs)	Average price obtained (cents per lb.)	Increase in returns to patrons over non-co-operative sales (cents per lb.)	Overall handling cost (cents per lb.)
Nova Scotia,	1915	1	163	12,271	33	—	—
	1916	2	224	18,508	41.125	—	.5
	1917	6	438	37,805	71.13	—	.5 to 1
New Brunswick	1915	1	9	1,104	35	—	—
	1916	2	39	5,130	38.25	—	—
	1917	1	—	6,558	63.5	—	.33
Prince Edward Island	1915	1	58	6,496	32.5	—	—
	1916	1	382	28,303	38.75	—	—
	1917	1	315	24,494	70.28	5 to 15	—
Quebec	1914	1	96	12,000	21.25	5 to 7	—
	1915	8	975	104,192	30.36	5 to 10	—
	1916	9	1,617	169,840	41.7	7 to 12	—
	1917	10	1,876	218,658	53.27	—	.5 to 1 (2)
Ontario	1914	1	69	15,742	20.4	—	—
	1915	1	81	20,295	26	—	—
	1916	1	—	17,991	35	—	—
	1917	4	—	316,944	60.88	—	1 (3)
Manitoba	1914	1	138	44,059	20.	—	—
	1915	2	193	75,425	26.8	5 to 7	1
	1916	2	440	151,071	31.9	—	—
	1917	—	497	170,230	59.75	—	1
Saskatchewan	1914	1	179	69,404	17.75	3 to 8	.75 to 1.5
	1915	1	318	150,328	27.77	—	.5
	1916	1	487	179,890	32.5	—	1
	1917	—	660	388,888	65.	—	4.75
Alberta	1914	6	63	134,427	19.9	—	—
	1915	5	199	208,368	26.75	—	—
	1916	7	609	1,140,117	31.33	—	—
	1917	8	—	1,850,000	59.25	—	.75 (4)
British Columbia . .	1916	1 (5)	62	21,756	31.5	—	—
	1917	1 (6)	60	10,200	61.25	—	—

(1) Number of societies of which data has been available. — (2) In Quebec some societies charge for handling a flat rate of 50 cents per member plus 3 cents a fleece, other societies 5 cents a fleece only and several charge 1 cent per pound. — (3) In Ontario handling charges of societies are 5 cents a fleece, 1 cent per pound or a flat rate of 25 cents per member for any number of fleeces up to 15 and 50 cents for any number over 15. — (4) This cost is given by one association only. — (5) Vancouver Island Flock Masters' Association. — (6) Interior of British Columbia Wool Growers' Association.

holders that there had been invested in warehouses about \$120,000 and that the company had about \$78,000 of working capital, \$46,131 of which was paid up stock. The motion was thereupon carried that the balance of stock should be called in at the earliest possible moment. It was also decided that in future stock should be sold on a basis of a cash payment equal to the price of one share of capital stock. Applicants for more than one share may pay on the instalment plan but the cash payment must not be less than \$10. When the cash payment is not equal to 20 % of the stock subscribed for, the subscriber must pay an amount equal to 20 % of the total subscribed for in excess of \$10 paid.

Since its formation to the end of 1920 the company has received from the provinces over eleven million pounds of wool for marketing. Details concerning this wool are given in the following table.

TABLE XIII. — *Amount of Wool, by Provinces, handled by the Canadian Co-operative Wool Growers, Limited, during the Years 1918, 1919 and 1920.*

Provinces	1918	1919	1920
	lbs.	lbs.	lbs.
Nova Scotia	79,995	229,863	103,664
New Brunswick	31,750		69,983
Prince Edward Island	52,294		51,859
Quebec	215,278	185,359	210,547
Ontario	747,330	792,701	679,892
Manitoba	363,000	288,527	370,872
Saskatchewan	394,068	749,947	865,175
Alberta	985,535	1,466,973	2,157,753
British Columbia	35,323	96,769	176,475
Canada	2,904,573	3,810,139	4,686,220

In addition to the above table the company handled 285,735 pounds of pelts in 1919 and 40,025 pounds in 1920. In the latter year 51 % of the sales were made to the American trade, 45 % to the Canadian and 4 % to the English trade. In 1920 the company marketed the wool of about twelve thousand farmers, the amount received being about one-third the total crop of Canada. In 1921 the Company made a profit of \$23,690.

Comments and criticisms were made with reference to the cost of handling wool by the company during the 1921 season and were replied to by the General Manager as follows: Only the 2 cents per pound selling charge and the 1½ cent per pound grading charge on all wools graded at Weston were actually levied as the co-operative charge. The next point was as to how the 2 cents per pound for the East and the 2½ cents per pound for the West were made use of and what was left over. In considering this it must be remembered that the organization is endeavouring to become strong and

permanent and that certain reserves must be built up as a matter of protection. The profit for 1921 was \$23,690; this amount works out at slightly more than $\frac{1}{2}$ cent per pound on the approximate quantity of four million pounds handled during the season. Further some \$10,000 had been written off, including advances to growers in 1920 not recovered. This meant another $\frac{1}{4}$ cent per pound. In addition about \$10,000 were written off for depreciation on equipment, working out at another $\frac{1}{4}$ cent per pound. The above shows that 1 cent per pound of the 2 or 2 $\frac{1}{2}$ cents collected, as the case may be, was not spent during the year. This 1 cent per pound totalled somewhat more than \$40,000 and was used to protect the organization in a business way. Ten thousand dollars out of the profits were allocated to the general reserve, six thousand dollars were set aside to pay the annual dividend and other amounts were allotted as a matter of protection to the shareholders in connection with the organization. It was also pointed out that 1921 was a 14 month period as compared with 12 months in 1920, the extra two months being made necessary owing to a change in the end of the financial years. This period involved an additional expenditure of \$10,000 or a further reduction of $\frac{1}{4}$ cent per pound. During 1921 the personnel had been decreased by 15 % with a consequent reduction of expenses on this score of \$3,500 as compared with 1920. The whole business of 1921 was carried on at about \$15,000 less than in 1920, and it was estimated that still another saving of \$15,000 would be made in 1922 over that of 1921. The General Manager concludes by saying "therefore from all the above, it is seen that of the 2 or 2 $\frac{1}{2}$ cent charge there is a total of 1 cent still left unspent, and therefore of all the 3, 4, 5, 6 and 7 cents per pound as apparently spoken of as charges made by the Organization in handling wool, there is actually existing only 1 or 1 $\frac{1}{2}$ cents per pound as the real Canadian Co-operative Wool Growers' charge."

(To be continued)

W. E. H. I.

Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

AUSTRALIA.

A SCHEME OF DROUGHT INSURANCE. — *Grain Growers' Guide*, Winnipeg (Canada).
1 March 1922.

In the last drought a few years ago the State of New South Wales lost 10,000,000 sheep and to prevent a recurrence a scheme of fodder conservation based on a system of drought insurance has been devised and is now undergoing final revision for submission to the State Parliament.

The chief points of the scheme are as follows: A board of six members is to be created, five representing the pastoral industry, the financial interests and the chamber of commerce, and one being the nominee of the Government. Power to control the whole of the drought insurance will be invested in this body by Act of the State Legislature. The State will be divided into 10 or 12 districts and local committees will be set up in each, working in conjunction with the central board.

The chief work of the central board will be the conservation of fodder. It will establish storage depots wherever it thinks them necessary and it will purchase and store fodder in these depots from time to time. Farmers will be guaranteed a price for their fodder and will be encouraged to grow crops of various kinds and to sell them to the board. When the fodder is needed it will be sold at a price — plus handling and interest charges and a fair rate of profit — which will ultimately make the scheme self-supporting. In five years it is hoped that it will be on a sound financial basis.

The financial side of the scheme will be based on the issue of three or four classes of bonds which will bear interest and be free of income tax. The board will sell the bonds and pastoralists generally will be expected to purchase them. The Government will contribute pound for pound to the amount of bonds purchased. Growers of fodder may accept payment in bonds and when they need fodder in time of drought these bonds will be accepted in payment. Another class of bond will be issued exclusively for the ordinary investor; it will bear a fair rate of interest but will carry no special privileges.

In brief, the idea is that in good seasons fodder will be bought cheaply, stored against a season of drought and sold when prices are high. The fodder will be sold in the ordinary market from year to year, but there will always be a sufficient reserve to tide over a drought. Until the scheme is in full working order it is estimated that the Government and sheep farmers will have to find approximately £5,000,000 for the first five years; after that will come the return on the money and the financial permanence of the scheme.

The plan has commended itself so well to the sheep farmers in the south of Queensland, which occasionally suffers from drought, that they are anxious to join in and, it is stated, arrangements will probably be made between the two states along these lines. It is also considered possible that when the fodder conservation scheme is in full working order it may be extended to the conservation of water, the other great lack that the agriculturists of Australia have to face. W. E. H. L.

AUSTRIA.

A SYSTEM OF MUTUAL AID AMONGST PEASANTS IN CASE OF FIRE.

The extraordinary depreciation of the Austrian crown has brought about very serious consequences in the most various fields of economic activity. In particular, when it is a case of fulfilling obligations resulting from a contract or agreement made prior to the War, the greatest difficulties present themselves. As far as possible, the legislature endeavours to lessen these difficulties, as for example, by the law on the modification of letting agreements and by the law on the regulation of the "Ausgedinge", of which we have on other occasions spoken in this Review.

The difficulties in relation to insurance are particularly heavy. Insurance contracts which, as usually happens, are stipulated for a term of years, are based on values which today are many times greater. Changes corresponding to actual values are usually made only when the old contract expires. But in general, partly owing to the natural conservatism of the peasantry and partly to the aversion from paying higher premiums, even the new insurance contracts are not stipulated on the basis of present values. How utterly inadequate the insurance is may be deduced from the table on page 519, in which we compare the prices of certain products and building materials with the sums assured by two insurance institutions.

The natural consequence of this under-insurance is, besides the serious prejudice resulting to the insurance institutions, which against their enormously increased expenses can only set very slightly increased receipts, an extreme discontent on the part of the insured persons when, in case of loss, they receive, to their great surprise, only very trifling compensation, which corresponds to the sum assured but not to the damage actually incurred.

Even in this, as in many other questions difficult of solution by ordinary means, recourse is had to methods which were formerly practiced and

Prices of Certain Products and of Building Materials and Sums Assured by Two Large Insurance Institutions.

Year	Average prices (in crowns) (1)										Sums assured (in millions of crowns) (2)			
	Hay (per quintal)	Straw (per quintal)	Wages per day of a bricklayer	Wages per day of a carpenter	Bricks (per thousand)	Cement (per quintal)	Skewed lime (per cubic metre)	Cart with two horses (p r day)	Wood (per cubic metre)	Finished walls in brickwork (per cubic metre)	By the "Niederösterreichische Landesbrandversicherungs-Anstalt" of Vienna (in Lower Austria only) (3)		By the "Wechselseitige Brandschaden-Versicherungs-Anstalt" of Vienna (All sums)	
											Buildings	Movables	Buildings	Movables
1914	7	3	0.65	0.70	45	4	15	22	55	25.80	654.5	168.8	2,267.7	535.7
1915	13	7	—	—	—	—	—	—	—	—	679.8	175.7	2,268.2	538.1
1916	13	12	—	—	—	—	—	—	—	—	731.7	198.4	2,301.4	556.3
1917	37	30	—	—	—	—	—	—	—	—	868.7	251.7	2,547.0	622.4
1918	125	120	2.40	2.20	440	35	180	170	250	201	1,114.2	326.0	3,272.3	815.0
1919	450	400	4.00	4.10	600	45	300	220	450	301	1,472.4	444.9	3,878.6	1,001.6
1920	1,250	500	13.00	13.00	4,700	520	1,750	1,000	2,000	1,725	4,916.6	1,377.7	8,670.8	2,405.8
1921	4,500	2,000	55.00	57.00	5,500	550	3,000	2,700	4,200	3,135	25,677.1	9,939.2	—	—

(1) See SCHULAFF: Die Preisbildung im Bauwesen in den Jahren 1914 bis 1921, in *Zeitschrift des Ingenieur- und Architektenvereines*, No. 27, 7 July 1922, page 191.

(2) See the financial statements and reports of the two institutions, which are the most widely patronized in the rural districts of Lower Austria.

(3) This institution also carries on insurance in other parts of Austria, where the sums assured in respect of buildings were 14,900,000 crowns in 1914 and 44,100,000 crowns in 1921; in respect of movables 2,400,000 crowns in 1914 and 7,300,000 crowns in 1921.

are even now usual, in their primitive form, in certain districts where, in case of fire, the neighbours or the peasants of the commune or of the district render voluntary aid.

At the meeting of the most powerful organization of the peasants of Lower Austria, the *Bauernbund*, held at the end of January 1922, it was decided to organize this form of mutual aid within the association itself. It is important that the rendering of aid should not be regarded as a substitute for the action of the insurance institutions, but as completing and extending it.

The mutual aid, according to the programme laid down, must take the form of prompt and generous help, in order to avoid as far as possible variations of price and of the purchasing power of money. It consists of contributions in money and in kind. The money contributions must be collected immediately by an agent of the local organization and be paid within a week to the person who has suffered loss. The contributions in kind are for the purpose of supplying him with the most urgent necessities and of helping him during the period of reconstruction. All those members are obliged to render help who bind themselves to do so by a handshake, and these same members have the right to demand help in case they themselves suffer damage. The appointed agents and the peasants' committees examine every case, ascertain whether the person who has suffered damage is entitled to help and, if such help is necessary, distribute the burden uniformly amongst all the members in the district. Contributions in kind must be furnished by the members living in the immediate vicinity, money contributions by all those living in the district. The members who refuse to give as much help as they ought are declared to be refractory and are struck off the list of members.

In view of the wide diffusion of the *Bauernbund*, this initiative is of great importance and undoubtedly represents a noteworthy attempt to strengthen the solidarity of the peasants. It will find ready acceptance in all places where there previously existed communal insurance against fire in a primitive form, as it represents a more complete form of that institution. It will be more difficult to introduce where for a long time mutual aid in case of fire has not been practised and where, too, the feeling of solidarity and the altruistic spirit are weaker. In such communes it is to be expected that participation in the scheme, after the first fires and particularly if fires occur frequently, would diminish. Lastly, even the disinterested valuation of the money to be paid and its just and uniform distribution of the contributions amongst the members will probably give rise to serious difficulties, and some doubt may naturally be felt as to the effective working of the system. It may be asked whether it would not be better, by increasing somewhat the sums assured, to make more use of the existing fire insurance institutions, with their solid basis of operations, proved by the experience of many years, and with their trained staff, adapting them to present conditions.

HERMANN KALLERUNNER.

FRANCE.

THE PRINCIPAL DISEASES OCCASIONING THE LOSSES OF LIVE STOCK MUTUAL INSURANCE SOCIETIES IN THE COURSE OF THE YEARS 1919, 1920 AND 1921. — *Annales de la Mutualité et de la Coopération agricole*. Paris, March-April 1922.

The two following tables have been drawn up by the National Federation of Agricultural Mutual Insurance and Co-operation, from the experience gained by its National Live Stock Re-insurance Association.

The first table is a statement of losses of cattle, covered by insurance in 1919, 1920 and 1921.

These losses come out at 5.5 per thousand animals insured in 1919; at 5.3 per 1000 animals insured in 1920; at 3.4 per 1000 animals insured in 1921.

After foot and mouth disease, the cause of very heavy losses in 1920, enteritis and the affections of the genito-urinary organs (especially following on calving) are the most frequent.

The second table is the statement of the losses among horses, etc. in the course of the same years. These losses are 11.2 per 1000 animals insured in 1919; 5.7 per 1000 insured in 1920, and 7.5 per 1000 insured in 1921.

Accidents and colics are the most frequent causes of mortality among horses, etc.

TABLE I. — *Statistics of the Principal Causes of Losses among Cattle for the Years 1919, 1920, 1921.*

	1919	1920	1921
Digestive organs	171 cases includ- ing . . . { enteritis . . . 99 { peritonitis . . . 23	131 cases includ- ing . . . { enteritis . . . 78 { peritonitis . . . 14	104 cases includ- ing . . . { enteritis . . . 60 { peritonitis . . . 15
Respiratory organs	27 cases	32 cases	8 cases
Circulatory organs	32 cases including pericarditis . . . 19	31 cases	18 cases
Genito-urinary organs	68 cases including cases follow- ing on calving 38	46 cases including cases follow- ing on calving 28	38 cases including cases follow- ing on calving 27
Nervous system	23 cases	22 cases	16 cases
Contagious diseases	144 cases includ- ing . . . { foot and mouth { disease . . . 70 { anthrax . . . 27 { tuberculosis . . . 23	242 cases includ- ing . . . { foot and mouth { disease . . . 175 { anthrax . . . 29 { snuffles . . . 18 { tuberculosis . . . 10	105 cases includ- ing . . . { foot and mouth { disease . . . 39 { tuberculosis . . . 42 { pneumonia . . . 16 { anthrax . . . 13
Accidents	27 cases	23 cases	37 cases
Miscellaneous	18 cases	12 cases	11 cases
Total	510 cases	539 cases	337 cases
Losses per 1000 head insured	5.5	5.3	3.4

TABLE II. — *Statistics of the Principal Causes of Losses among Horses, etc., for the Years 1919, 1920 and 1921.*

	1919	1920	1921
Digestive organs	81 cases including colic41 enteritis .20 intestinal congestion 15	42 cases including colic . . .28 enteritis . 7	36 cases including colic . . .18 intestinal congestion. 10
Respiratory organs	17 cases	10 cases	12 cases
Circulatory	11 cases	5 cases	4 cases
Genito-urinary organs	8 cases	5 cases	5 cases
Nervous system	20 cases including paralysis . .15	14 cases including paralysis . 7 paraplegia 7	11 cases including paralysis . . 7
Contagious diseases.	3 cases	1 case	3 cases
Accidents	13 cases	10 cases	20 cases
Miscellaneous	7 cases	6 cases	15 cases
Total	160 cases	88 cases	106 cases
Losses per 1000 head insured	11.2	5.7	7.5

M. B.

NORWAY.

PROFIT-SHARING IN THE NORWEGIAN SOCIETY FOR MUTUAL INSURANCE AGAINST FOREST FIRES. — Det norske gjensidige Skogbrandforsikringselskap (*The Norwegian Society for Mutual Insurance against Forest Fires*). Christiania, 1913.
— Det norske gjensidige Skogbrandforsikringselskap, 10 aars (*Ten Years' Working of the Norwegian Society for Mutual Insurance against Forest Fires*). Christiania, 1921.
— Rules and Regulations of the Society.

The Norwegian* Society for Mutual Insurance against Forest Fires arranges for profit-sharing among its members in two quite different ways.

In the first place, by the terms of its constitution, it collects only a minimum premium in advance, reserving the right to demand a supplementary premium at the end of the year, this not to exceed three times the amount of the initial premium. Every insured person thus has a powerful inducement to neglect no precaution against all causes of danger to his woods, and also to fight fires that may break out, such fires, however, not establishing a claim to an indemnity of more than the present value of the devastation caused.

There is moreover a second form of profit sharing for the benefit of members who have been insured for more than four years. These members represent, from the point of view of insurance, a most advantageous risk. In the first place, on their application for admission to insurance, the usual strict examination of the proposed risks was held. Then, when the agreement is in force, the Society reserves to itself the right of cancelling a policy, not only after a loss which has been declared and indemnified, but even after a fire on which no claim has been made. Agreements that have successfully passed through this double weeding out process naturally offer exceptionally sound guarantees: a preferential treatment is accorded to them, consisting in a gradual lessening of the premiums, ending in an additional share in the society's profits. The insurance premium, which is theoretically 1.25 per thousand, actually admits of a reduction of one fifth at the end of four years, and a rebate of 0.4 per thousand at the end of eight years. The consequence is that the average premium per thousand shows from year to year a very sharp fall. From 1.32 in 1912 it falls to 1.30 in 1913, to 1.29 in 1914, to 1.30 in 1915, to 1.20 in 1916, to 1.17 in 1917 and 1918, to 1.13 in 1919, to 1.03 in 1920, to 0.98 in 1921. And in reality, the premium actually paid by policy holders of four years' standing, and especially by those of eight years, is much less, from the fact that those who have just become insured, and do not benefit by the advantages enumerated above, nevertheless help to fix the average premium.

M. B.

Miscellaneous Questions relating to Agricultural Economy

ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

GREAT BRITAIN AND IRELAND.

THE WORK OF THE AGRICULTURAL WAGES BOARD OF ENGLAND AND WALES.

The Agricultural Wages Boards which were established in England and Wales in Scotland and in Ireland during the War for the purpose of fixing minimum wages have since been replaced by Joint Conciliation Committees which determine wages by agreement between the representatives of the employers and of the workers. We think it of interest to give an account of the work of the Agricultural Wages Board of England and Wales and a full statement of the wages fixed by it from its establishment under the Corn Production Act of 1917 to its dissolution in 1921.

§ 1. THE AGRICULTURAL WAGES BOARD.

In Part II of the Corn Production Act it was enacted that the Board of Agriculture and Fisheries, in consultation with the Ministry of Labour, should appoint an Agricultural Wages Board for the fixing of minimum wages for workmen employed in agriculture in England and Wales. To the terms "workmen" and "employed in agriculture" wide interpretations were given, so that, in fact, the Wages Board was empowered to fix minimum wages for men, boys, women and girls, working not only on farms, but on osier land, woodland, orchards, market gardens and nursery grounds.

The Wages Board was to consist of members representing employers, members representing workers and members appointed by the Board of Agriculture who might be expected to form an impartial judgement as between employers' and workers' interests. It was left to the Board of

Agriculture to make regulations fixing the numbers of each class of member, subject to the provision that the representatives of the employers and the representatives of the workers must be equal in number and that the appointed members must not exceed in number one quarter of the whole Board.

The Board of Agriculture decided that the Wages Board should consist of 39 persons, of whom seven were to be appointed members and the remainder representative members (1). Of the 16 members representing the employers, eight were to be nominated by the Board of Agriculture, while each of the following bodies was to be asked to elect two members: The Council of the Royal Agricultural Society of England; the General Executive Committee of the National Farmers' Union; the Council of the Central and Associated Chambers of Agriculture; the Welsh Agricultural Council. Of the members representing workmen six were to be elected by the Executive Committee of the National Agricultural Labourers' and Rural Workers' Union, and two by the General Executive Committee of the Workers' Union, while the remainder were to be nominated by the Board of Agriculture.

If the result of the elections were such that in the opinion of the Board of Agriculture a fair representation of all classes of farming and of the various conditions of employment in agriculture in all parts of the country could not be secured, the Board of Agriculture reserved to itself the right to nominate a representative member in place of any person elected.

The normal term of office of an appointed member was fixed at two years and that of a representative member at three years, but it was laid down that at the end of one year five members representing employers and five members representing workers should retire by lot and at the end of two years other five representing employers and five representing workers.

To preserve the balance between employers' and workers' representatives it was provided that if at any meeting their numbers were unequal, the side which was in a majority could arrange that one or more of their members should refrain from voting. Failing such arrangement, the chairman might, if he thought desirable, adjourn the voting on any question to another meeting of the Board.

The Wages Board was formed in accordance with these regulations, and its first meeting was held on 6 December 1917 (2).

Revised Regulations governing the constitution of the Agricultural Wages Board were issued in September 1920 (3). The principal change

(1) PROVISIONAL REGULATIONS WITH RESPECT TO THE CONSTITUTION AND PROCEEDINGS OF THE AGRICULTURAL WAGES BOARD (ENGLAND AND WALES) set up under the Corn Production Act, 1917, issued by the Board of Agriculture on 28 September 1917.

(2) *Journal of the Board of Agriculture*, December 1917.

(3) REGULATIONS MADE UNDER THE CORN PRODUCTION ACT 1917 WITH RESPECT TO THE CONSTITUTION AND PROCEEDINGS OF THE AGRICULTURAL WAGES BOARD (ENGLAND AND WALES) issued by the Ministry of Agriculture on 23 September 1920.

was that of the 16 seats allocated to representatives of the employers, 13 were to be filled by election by the National Farmers' Union (one of the members so elected to be representative of Welsh farmers), one seat by election by the Welsh Farmers' Union, the other two employers' representatives being nominated by the Board of Agriculture. Of the 16 seats for representatives of workers, nine were to be filled by election by the National Union of Agricultural Workers, five by election by the Workers' Union and the remaining two by nomination by the Minister.

§ 2. DISTRICT WAGES COMMITTEES.

The Corn Production Act provided also for the formation of District Wages Committees. The appointment of such Committees was left to the option of the Agricultural Wages Board, subject to the right of the Board of Agriculture to insist on their formation. The areas for which they were to act was left to the Wages Board to determine, but their composition was to be settled by regulations made by the Board of Agriculture. The Act merely laid down that there was to be equal representation on the District Committees of local employers and local workers and that at least one member of the Wages Board or other person nominated by the Board of Agriculture should act on each District Committee.

In determining the areas in which the District Wages Committees were to act the Wages Board took as the basis the geographical counties, but in some cases counties were grouped to form a single area (1). In all 39 districts were formed of which 27 corresponded to geographical counties, while 11 contained two or more counties. One of the areas was less than a county, the Furness District having been detached from the county of Lancashire and grouped with Cumberland and Westmorland.

The method adopted for the formation of District Wages Committees was for the members of the Wages Board representing the employers to recommend representatives of the local employers, while the members representing the workers recommended representatives of the local workers. These recommendations were carefully considered by a Selection Committee, consisting of four employers' representatives, four workers' representatives and four appointed members. The Selection Committee in turn made recommendations to the Wages Board, who had the final decision in regard to the nomination of the representatives of the local employers and the local workers. To these were added the impartial members appointed for each Committee by the Board of Agriculture.

The earliest District Wages Committees to be formed were established at the end of January 1918, and by the middle of May the Agricultural Wages Board was able to issue a notice stating that Committees had been formed in each of the 39 areas into which England and Wales had been divided.

Under the revised Regulations issued in September 1920, the Agri-

(3) *Journal of the Board of Agriculture*, January 1918.

cultural Wages Board, in appointing representative members had to make their selection from among persons nominated by organizations of employers and workers respectively.

It was the function of the District Wages Committees, as laid down by the Corn Production Act, to recommend to the Wages Board minimum rates of wages applicable to their districts. Only the Wages Board itself could fix, vary or cancel any such rate but it could not make any orders to this effect which should be applicable in any area where a District Wages Committee existed, unless the Committee had either recommended the rate or its variation or cancellation, or had had an opportunity of reporting thereon to the Board.

The Act also empowered the Wages Board to delegate any of its powers and duties (other than the power and duty of fixing minimum rates) to the District Wages Committees. The principal power which was so delegated was that of granting "permits of exemption," that is permits to workers on time-work who were affected by mental or other infirmity or physical injury which rendered them incapable of performing the work of a normally efficient workman to accept employment at rates less than the minimum wage.

§ 3. PROCEDURE IN FIXING MINIMUM RATES.

In fixing any minimum rate of wages the Agricultural Wages Board was obliged, as we have seen, either to act upon the recommendation of a District Wages Committee or to give the Committee the opportunity to report upon the proposal. It had also to give public notice of the rate it proposed to fix and to consider any objections which might be lodged with it within one month. When a rate was fixed it had further to give notice of such rate for the information of the employers and workers affected. The same procedure applied to the variation or cancellation of any Order fixing a minimum rate.

§ 4. THE PRINCIPLES ON WHICH MINIMUM WAGES WERE FIXED.

The Corn Production Act imposed upon the Agricultural Wages Board the duty of fixing minimum rates of wages for *time-work* and empowered it, if it thought it necessary or expedient, also to fix minimum rates of wages for *piece-work*. Considerable latitude was allowed to the Board on fixing rates applicable universally, or different rates for different districts, for different classes of workers or for different kinds and conditions of employment.

In the case of able bodied men the Act itself fixed a rate for time-work below which the minimum rate to be fixed by the Wages Board was not to go. This rate was to be such that, when the customary allowances were taken into account, the total wages would be equivalent to payment for an ordinary day's work at a rate of 25s. a week. This provision did not apply to boys, women and girls.

The principle laid down by the Act for the guidance of the Wages Board in fixing minimum rates, whether for time-work or for piece-work, was that it should try to secure, so far as practicable, for able-bodied men such wages as were, in its opinion, adequate to promote efficiency and to enable a man in an ordinary case to maintain himself and his family in accordance with such standard of comfort as might be reasonable in relation to the nature of his employment.

When a minimum rate had been fixed, the payment by an employer of a less rate was an offence punishable by a fine of not more than £20. If, after conviction, the employer persisted in paying less than the minimum rate fixed, he rendered himself liable to a fine not exceeding £1 for every day on which the offence was continued. Pending the fixing of minimum wages by the Wages Board, the rate of 25s. a week for able-bodied men was made applicable all over the country, and if less wages were paid the worker was entitled to recover the difference from his employer as a civil debt. When proceedings to recover were taken, the value of the allowances, if it were disputed, was to be determined by the Court.

§ 5. BENEFITS AND ALLOWANCES AS PART PAYMENT OF WAGES.

The Agricultural Wages Board found it necessary to take steps at once to decide upon the principles or method to be adopted in estimating the value of those benefits and allowances which were to be calculated as part payment of wages. At its second meeting, held on 20 December 1917, it appointed two committees, each consisting of four employers' representatives, four workers' representatives and four appointed members to consider respectively on what basis the rent of cottages should be assessed and other benefits and allowances should be valued (1).

It was not, however, until September 1918 that the Board issued an order on the subject. This order, which was entitled "Order as to Benefits and Advantages which may be Reckoned as Payment of Wages in lieu of Payment of Cash," defined such benefits and advantages as including provision by an employer for a workman employed by him of:

- (1) Milk, including skimmed or separated milk.
- (2) Potatoes.
- (3) Lodging, except in any case in which the District Wages Committee shall determine that the lodging accommodation provided is so defective as to be injurious to health.
- (4) Board, including any meals but not intoxicating drink (2).
- (5) A cottage, including any garden hitherto given or let with the cottage, except where the cottage is one in regard to which the Medical Officer of Health has reported that it is in a state so dangerous or injurious to health as to be unfit for human habitation.

(1) *Journal of the Board of Agriculture*, January 1918.

(2) It is illegal under the Truck Acts to reckon intoxicating drinks as allowances in part payment of wages.

The values at which milk and potatoes were to be reckoned were the current producers' wholesale prices, which were to be ascertained and determined by the District Wages Committee. Lodging and board were to be reckoned at such weekly sums as the District Wages Committee should determine.

The value of new milk was originally determined, for all parts of the country, as 6 $\frac{1}{2}$ d. per quart or the wholesale price fixed for any particular district by the Local Food Control Committee, whichever were the lesser. For skimmed or separated milk, the value was universally fixed at 8d. per gallon.

Under a revised determination which came into force on 19 July 1920, the value of new milk was to be reckoned as 4 $\frac{1}{2}$ d. per quart from 1 May to 30 September and as 6d. per quart from 10 October to 30 April.

For potatoes of the second grade, the values originally determined varied from £5 5s. per ton up to £7 10s. In the majority of counties it was determined at £6 5s. or £6 10s. The value of potatoes of the first grade was determined as 10s. per ton above that of potatoes of the second grade.

A revised determination was made with effect from 13 December 1920, under which values varying from £10 to £6 were fixed for potatoes of any grade or variety.

Great differences were apparent in the estimation of the value of board and lodging. For full board and lodging for a week of seven days, the estimated values in the various District Wages Committee areas as originally determined and as subsequently modified are shown in Table I (male workers) and Table II (female workers).

Values were also determined in all areas for partial board and lodging of various degrees as, for example, lodging only, all food and drink (excluding intoxicants), dinner only, breakfast only. Similar variations were observable in the values determined in the different areas, as in the values of full board and lodging.

It will be noted from Table II that, as from 14 July 1919, the values of full board and lodging were made uniform for female workers throughout England and Wales and the same is true of the values determined for partial board and lodging.

The method laid down for the assessment of the value of a cottage was less simple. If the cottage were held from the employer rent and rate free, the provision of the cottage might be reckoned at an amount not exceeding 3s. per week. In other words an amount not exceeding 3s. per week may be deducted from the minimum wage.

A District Wages Committee might, however, decide that the average value customarily attached to cottages in its area was less than 3s. a week and might fix a lower maximum amount at which the provision of a cottage should be reckoned. In a few parts of the country, this maximum value was fixed by District Wages Committees at less than 3s. per week. Thus in North Buckinghamshire it was fixed at 2s.; in Northamptonshire, Herefordshire, Mid-Buckinghamshire and parts of the county of Somerset

TABLE I. — *Value of Full Board and Lodging as Determined for Male Workers.*

District Wages Committee Areas	Full board and lodging at various ages									
	Over 18		17-18		16-17		15-16		14-15	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
<i>A. As originally determined:</i>										
Berkshire; Buckinghamshire; Cambridgeshire; Huntingdonshire and Bedfordshire; Cheshire; Derbyshire; Essex; Hampshire; Hertfordshire and Middlesex; Kent; Lancashire (except Furness District); Lincolnshire; Norfolk; Northumberland and Durham; Nottinghamshire; Oxfordshire; Somerset; Suffolk; Sussex; Warwickshire; Wiltshire; Yorkshire	18	0	18	0	17	0	15	0	12	0
Cumberland, Westmoreland and the Furness District of Lancashire; Dorset; Leicestershire and Rutland; Northamptonshire; Shropshire; Staffordshire	17	6	17	6	16	6	15	0	12	0
Surrey (1); Herefordshire	17	0	17	0	16	0	15	0	12	0
Devonshire	16	0	16	0	15	0	13	0	11	0
Corwall; Gloucestershire; Worcestershire; Brecon and Radnor; Denbigh and Flint; Glamorgan and Monmouth (2)	15	0	15	0	15	0	13	0	11	0
Merioneth and Montgomery	14	0	14	0	14	0	13	0	11	0
Pembroke, Carmarthen and Cardigan	12	6	12	6	12	6	11	0	10	0
Anglesey and Carnarvon	12	0	12	0	12	0	11	0	10	0
<i>B. As subsequently varied:</i>										
Cumberland, Westmoreland and the Furness District of Lancashire; Glamorgan and Monmouth; Northumberland and Durham; Staffordshire; Yorkshire	20	0	18	0	17	0	15	0	12	0
Anglesey and Carnarvon; Berkshire; Buckinghamshire; Cambridgeshire, Huntingdonshire and Bedfordshire; Cheshire; Denbigh and Flint; Essex; Hampshire; Hertfordshire and Middlesex; Kent; Lancashire (except the Furness District); Lincolnshire; Merioneth and Montgomery; Norfolk; Nottinghamshire; Oxfordshire; Pembroke; Carmarthen and Cardigan; Somerset; Suffolk; Sussex; Warwickshire; Wiltshire	18	0	18	0	17	0	15	0	12	0
Northamptonshire; Leicestershire and Rutland	18	0	18	0	16	6	15	0	12	0
Surrey	18	0	18	0	16	0	15	0	12	0
Brecon and Radnor	18	0	18	0	13	0	13	0	11	0
Dorset; Shropshire; Worcestershire	17	6	17	6	16	6	15	0	12	0
Gloucestershire; Herefordshire	17	0	17	0	16	0	15	0	12	0
Corwall; Devonshire	16	0	16	0	15	0	13	0	11	0

(1) Male workers over 21 years in Surrey, 17s 6d.

(2) Male workers over 19 years in Glamorgan and Monmouth, 15s 6d.

TABLE II. — *Value of Board and Lodging as Determined for Female Workers.*

District Wages Committee Areas	Full board and lodging at various ages									
	Over 17		16-17		15-16		14-15		Under 14	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
<i>A. As originally determined :</i>										
Berkshire; Buckinghamshire; Cambridgeshire, Huntingdonshire and Bedfordshire; Cheshire; Derbyshire; Essex; Hampshire; Hertfordshire and Middlesex; Kent; Lancashire (except Furness District); Lincolnshire; Norfolk; Northumberland and Durham; Nottinghamshire; Oxfordshire; Somerset; Suffolk; Sussex; Warwickshire; Yorkshire.	13	0	12	0	11	0	10	0	9	0
Cumberland, Westmoreland and the Furness District of Lancashire; Dorset; Leicestershire and Rutland; Northamptonshire; Shropshire; Staffordshire; Surrey	12	6	11	6	11	0	10	0	9	0
Herefordshire	12	0	11	0	11	0	10	0	9	0
Devonshire	11	6	11	0	11	0	10	0	9	0
Anglesey and Carnarvon; Brecon and Radnor; Cornwall; Denbigh and Flint; Glamorgan and Monmouth; Gloucestershire; Merioneth and Montgomery; Pembroke, Carmarthen and Cardigan; Wrexhamshire	11	0	11	0	11	0	10	0	9	0
<i>B. As varied with effect from 14 July 1919 :</i>										
All District Wages Committee Areas in England and Wales.	13	0	12	0	11	0	10	0	9	0

at 2s. 6d. In by far the greater part of the country, however, the District Wages Committees agreed to the general estimate of 3s. per week.

The District Wages Committees were also authorized to decide as to any particular cottage that it was defective in respect of accommodation, repairs or sanitation, and to fix an amount to be deducted from the maximum value on the ground of such defects.

Where the cottage was held by the worker from the employer at a rental, which is often a "customary" or "nominal" rental, the provision of the cottage might still be reckoned as a "benefit or advantage," provided the amount of rent and rates paid by the occupier was less than the maximum value fixed for the district (generally, as we have seen, 3s. per week). The amount which might be deducted from the minimum wage in respect of the provision of such a cottage was the maximum value less the amount of rent and rates paid by the occupier. If the rent and rates paid by the occupier of the cottage equalled or exceeded the maximum value, no deduction in respect of it might be made from the payment in cash of the full minimum wage.

The Order made by the Wages Board did not, of course apply to cottages which were held under a contract of tenancy which was separate and distinct from the contract of service. It was accordingly open to employer and worker to agree for the payment of the minimum wages in full and to make an independent agreement for the renting of the cottage.

§ 6. HOURS OF EMPLOYMENT: OVERTIME AND "WALKING TIME".

In fixing minimum rates of wages for time-work, the Wages Board determined both the minimum wages for a week's work and also the minimum rates per hour to be paid for overtime. To decide what should be considered overtime it was necessary to fix the number of hours' work which constituted the normal week's work. This varied somewhat from county to county and was different in "Summer" from what it was in "Winter." "Summer" was with rare exceptions reckoned as the period from the first Monday in March to the last Sunday in October; "Winter" was the remaining period of the year. The most usual number of hours per week originally fixed for ordinary labourers was 54 in Summer and 48 in Winter, but in regard to special classes of workers there were great variations, not only as between counties, but as between different parts of the same county. So difficult was it to determine the number of hours worked by special classes that at first the Wages Board was obliged often to content itself in its orders with stating that the number of hours per week was to be taken as the "customary" number, but it afterwards endeavoured to fix a definite number of hours in all cases.

Even when the number of hours per normal week's work was fixed this was not sufficient to determine what work should be counted as overtime work. The distribution of the hours had to be considered. In the case of ordinary workers, it was assumed in the earlier orders that no ordinary work was done on Sundays. All work done on Sundays was,

therefore, treated as overtime and a special minimum rate was fixed for Sunday overtime work. A minimum rate was also fixed for week-day overtime work and this was payable in respect of all employment in any week (excluding Sundays) in excess of the number of hours which formed the basis of the weekly wage.

A demand soon arose for the adoption in agriculture of the weekly half-holiday which is customary in England in almost all other kinds of labour. The Wages Board showed themselves sympathetic towards this demand and by an Order which came into force on 3 March 1919 extended the definition of overtime employment to include "all employment in excess of 6 $\frac{1}{2}$ hours on a Saturday or on such other day (not being Sunday) in every week as may be agreed between the employer and the worker."

The original definition, be it noted, was merely extended. The hours in excess of 6 $\frac{1}{2}$ hours worked on the short day were reckoned in any case as overtime, but they were not counted twice over. If, for example, the number of hours which formed the basis of the weekly wage were 48 and the worker did 51 hours' work in the week (exclusive of Sunday) including 8 hours done on the short day, he would be paid overtime wages for 3 hours, the difference between 51 hours and 48. The 1 $\frac{1}{2}$ hours' overtime work which he did on the short day would be included in the three hours' overtime which he had done during the week.

This is the simplest case. Let us take now the case in which the worker only did 48 hours during the week, but did 8 hours on the short day. Here it was necessary to inquire what agreement the employer had made with the worker.

Suppose first that the hours of work agreed between the employer and the worker are 48, to be spread equally over the six days. On the short day 1 $\frac{1}{2}$ hours out of the 8 hours worked would be overtime. Hence the hours of work agreed *exclusive of overtime employment* are only 46 $\frac{1}{2}$ hours per week. But according to clauses in the previous orders of the Wages Board, if the agreed number of hours in the week, exclusive of overtime employment, were less than the number of hours which forms the basis of the weekly wage (in the supposed case, 48 hours), the full minimum weekly wage was nevertheless to be paid. In this case, then, the worker was entitled to the minimum weekly wage plus overtime wages for 1 $\frac{1}{2}$ hours.

In the second place, let us suppose that the employer had agreed with the worker that the 48 hours' work should be so arranged that only 6 $\frac{1}{2}$ hours should be done on the short day and the remaining 41 $\frac{1}{2}$ hours spread over the other five days. In the supposed case the worker had, it is true, done 48 hours during the week, but he had only done 46 $\frac{1}{2}$ hours of normal work instead of 48 hours, as agreed. The employer, then, was entitled to deduct the wages, calculated at the normal rate, in respect of 1 $\frac{1}{2}$ hours. (The normal rate per hour would in the supposed case be a 48th part of the minimum weekly wages). But, on the other

hand, the worker was entitled to be paid overtime wages in respect of the $1\frac{1}{2}$ hours of overtime which he worked on the short day.

These examples sufficiently explain the method by which overtime was calculated in respect of the short day (1).

It should be noted that the Wages Board had no power to determine or to regulate the hours of work of agricultural workers or their arrangement. Employer and worker might agree upon any number of hours arranged in any way they liked, but they did so subject to the condition that if the total number of hours on week-days exceeded a certain number of hours determined by the Board, or if the hours worked on the short day exceeded $6\frac{1}{2}$ hours, the excess hours were to be regarded as overtime.

The short day was originally intended to be of universal application, but for certain counties Orders were issued making it inapplicable to workers who, under an agreement with their employers, were entitled to a week's holiday on full pay in each half-year, or a fortnight's holiday on full pay in each year, or to payment of double pay for a week's work in each half-year or for a fortnight's work in each year.

The original Order relating to the short day laid it down that the week-day overtime rate should be payable for all employment in excess of $6\frac{1}{2}$ hours on that day "except time spent on such day by stockmen of any class in connection with the feeding and cleaning of stock," but three months later, the Board issued an order to vary the definition of overtime by omitting this exception, so that for stockmen also any employment in excess of $6\frac{1}{2}$ hours on the short day was to be treated as overtime.

In some counties, however, the exception was renewed by special Orders for certain classes of workers.

In one or two cases the employment to which the weekday overtime rates for male workers related was defined by reference to the number of hours of work on each day, and this method was universally adopted in the case of female workers, with the addition that all employment before 7 a. m. or after 5 p. m. was to be considered as overtime employment.

When a definite number of hours per week was fixed for the special classes it was almost invariably inclusive of Sunday, and overtime was reckoned accordingly.

In connection with the hours of labour the question arose as to whether "walking time," that is the time spent by the worker in walking from his cottage to his place of work and in returning to his cottage, should be reckoned in the hours worked. The position was stated as follows in the *Wages Board Gazette* of 1 February 1919: "In the absence of any special provision in the contract of service or of any well-established custom of the farm, the time spent by the worker in proceeding from his cottage to his place of work, would not be reckoned as employment... By 'place of work' is here meant the actual place where the work is carried

(1) *Wages Board Gazette*, 15 January and 1 February 1919.

on, but if a man's duties require him to go and return to the farmhouse before or after his work in the fields (*e. g.*, for the fetching or taking back of horses or tools) the time occupied in walking between the two places would rank in his working hours. But if his duties are such that he can go straight from his home to the place of work in the fields and back in the same way, the walking time would not be so reckoned, unless his contract or the custom of the farm provide that he should be paid for that time. The burden of proving the custom would lie on the worker; if it were proved, the custom must be read into the contract of service unless it is expressly excluded."

§ 7. MINIMUM WAGES FOR ORDINARY MALE WORKERS.

We now give a series of tables showing the minimum wages fixed at different times for ordinary male workers, that is, for all male workers except certain classes for which special wages were fixed.

Table III (pages 538-539) shows the minimum weekly wages and overtime rates per hour which had been fixed before 1 January 1919 for ordinary male workers.

The minimum rates for male workmen under 18 years of age were subject to a deduction of 20 per cent. during the first two months of the worker's employment in agriculture, except in Merioneth and Montgomery. This provision was subsequently applied also to Merioneth and Montgomery and remained applicable in all areas, whatever changes were made in the minimum rates fixed.

The number of hours per week in respect of which the minimum wage was payable in most districts was 54 in Summer and 48 in Winter, but in Anglesey it was 56 in Summer and 51 in Winter; in Cheshire, 60 in both Summer and Winter; in Glamorgan and Monmouth, 57 in Summer and 49 $\frac{1}{2}$ in Winter; in Herefordshire, 56 in Summer and 48 in Winter; in Lancashire (excluding the Furness District), 55 $\frac{1}{2}$ in both Summer and Winter; in Nottinghamshire, 60 in Summer and 54 in Winter; in Oxfordshire 52 in both Summer and Winter; in Shropshire, 57 in Summer and 54 in Winter; in Staffordshire, 57 in both Summer and Winter; and in Yorkshire, 54 in Summer and 51 in Winter.

The Sunday overtime rate was payable in respect of all employment on a Sunday and the week-day overtime rate (except in Buckinghamshire and Cheshire) in respect of all employment in any week (excluding Sunday) in excess of the number of hours in Summer and Winter respectively in respect of which the minimum wage was payable. In Buckinghamshire and in Cheshire overtime employment on weekdays was reckoned as all employment in excess of a specified number of hours per day.

No minimum wages for ordinary male workers under 18 years of age had been fixed in Brecon and Radnor before 1 January 1919, but by an Order which came into operation on 10 February 1919, they were fixed as follows: From 17 to 18 years, 25s.; from 16 to 17 years, 20s.; from 15 to 16 years, 18s.; from 14 to 15 years, 14s.; under 14 years, 10s. The

corresponding overtime rates were: From 17 to 18 years, weekdays 7d., Sundays 8 ½d.; from 16 to 17 years, 5 ½d. and 6 ½d.; from 15 to 16 years, 5d. and 6d.; from 14 to 15 years, 4d. and 4 ½d.; under 14 years, 3d. and 3 ½d.

By an Order which came into operation on 19 May 1919, an all-round addition was made to the minimum weekly wages previously fixed for ordinary labourers of 18 years of age and over, except in Cumberland, Westmoreland and the Furness District of Lancashire. The increase was: Workers from 18 to 19 years of age, 3s. a week; from 19 to 20 years, 4s. a week; from 20 to 21 years, 5s.; of 21 years and over, 6s. 6d.

At the same time the number of hours per week in respect of which the minimum wage was payable for workers of 18 years and over was made 54 in Summer and 48 in Winter in all counties in England and Wales, with the same exceptions. In those counties where the number of hours per week had been in excess of this number the additions were made, not to the minimum wages previously in force, but to those wages reduced to a basis of 52 hours per week all the year round.

The overtime rates per hour were also adjusted, being fixed on the basis of time and a quarter on week-days and time and a half on Sundays.

The minimum wages for ordinary male workers as they became when this Order came into force are shown in Table IV (pages 540-541). The minimum rates for workers under 18 years of age are (except in the case of Brecon and Radnor) the same as in Table I and the observations apply to them, except in regard to overtime.

The Order relating to the short day having in the meantime come into force, the overtime rates shown in Table II were payable in respect of all employment on a Sunday, all employment in excess of 6½ hours on the short day (except time spent on such day by stockmen of any class in connection with the feeding and cleaning of stock) and of all employment in any week (excluding Sunday) in excess of the number of hours in Summer and Winter respectively in respect of which the minimum wage was payable.

On 6 October 1919 an Order came into force whereby without changing the figures of the minimum wages (except for Cumberland, Westmoreland, and the Furness District of Lancashire) they were made applicable, in all counties except Cheshire, to a week of 50 hours in Summer and 48 hours in Winter, as well for ordinary male workers under 18 years of age as for those over that age. For Cumberland, Westmoreland and the Furness District of Lancashire, the following minimum wages were fixed at this time for ordinary male workers over 18 years of age: Over 21 years, 40s.; between 20 and 21 years, 39s.; between 19 and 20 years, 38s. 6d.; between 18 and 19 years, 38s. The corresponding overtime rates were: Over 21 years, weekdays 11d., Sundays 1s. 1 ½d.; between 20 and 21 years, 11d. and 1s. 1d.; between 19 and 20 years, 10 ½d. and 1s. 1d.; between 18 and 19 years, 10 ½d. and 1s. 0 ½d.

This Order did not apply to Cheshire, for which a special Order was issued and came into operation on 27 October 1919. Under this Order the following minimum wages were fixed for a week of 54 hours, Winter

TABLE III. — *Minimum Weekly Wages and Overtime*

District Wages Committee Areas	Minimum weekly wages at various ages							
	Over 21	20-21	19-20	18-19	17-18	16-17	15-16	14-15
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Glamorgan and Monmouth	36 6	35 0	35 0	32 0	28 0	24 6	21 0	18 0
Cheshire	36 0	36 0	36 0	36 0	31 0	26 0	21 0	16 0
Northumberland and Durham	36 0	36 0	36 0	33 0	28 0	23 0	18 0	14 0
Cumberland, Westmoreland and Furness District of Lancashire	35 0	35 0	35 0	35 0	30 0	25 0	20 0	15 0
Yorkshire	35 0	35 0	35 0	35 0	30 0	25 0	20 0	15 0
Lancashire (except Furness District)	35 0	35 0	35 0	35 0	30 0	25 0	20 0	15 0
Nottinghamshire	35 0	35 0	35 0	35 0	30 0	25 0	20 0	15 0
Staffordshire	35 0	34 0	32 0	32 0	26 0	22 0	18 0	14 0
Middlesex	34 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Lincolnshire	34 0	30 0	30 0	30 0	26 0	22 0	18 0	14 0
Kent	33 0	33 0	33 0	33 0	28 0	23 0	18 0	14 0
Surrey	33 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Shropshire	33 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Hertfordshire	32 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Essex; Sussex	32 0	30 0	30 0	30 0	26 0	22 0	18 0	14 0
Anglesey and Carnarvon	31 6	31 6	31 6	31 6	26 0	22 0	18 0	14 0
Cornwall	31 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Derbyshire	31 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Devonshire; Hampshire; Pem- broke, Carmarthen, Cardigan	31 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Herefordshire	31 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Leicestershire and Rutland (1)	31 0	31 0	31 0	31 0	26 0	22 0	18 0	14 0
Oxfordshire	30 0	30 0	30 0	30 0	26 0	22 0	18 0	14 0
Berkshire; Cambridgeshire, Huntingdonshire and Bed- fordshire; Denbigh and Flint; Dorset; Gloucestershire; Norfolk; Northamptonshire; Oxfordshire; Somerset; Suffolk; Warwickshire; Wiltshire; Worcestershire	30 0	30 0	30 0	30 0	26 0	22 0	18 0	14 0
Buckinghamshire	30 0	30 0	30 0	30 0	26 0	22 0	18 0	14 0
Merioneth and Montgomery	30 0	30 0	30 0	30 0	25 0	20 0	18 0	14 0
Brecon and Radnor	30 0	30 0	30 0	30 0	..	..	..	..

(1) The weekly overtime rates for workers over 18 years of age in Leicestershire and Rutland were 8 1/2

Ordinary Male Workers in force on 1 January 1919.

Overtime rates at various ages																
Per 11	20-21		19-20		18-19		17-18		16-17		15-16		14-15		Under 14	
	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays
11 1/2	9	11	9	11	8 1/2	10	7 1/2	9	6 1/2	7 1/2	5 1/2	6 1/2	4 1/2	5 1/2	2 1/2	3
10	9	10	9	10	9	10	8	9 1/2	6 1/2	8	5	6 1/2	4	5	3	3 1/2
12	10	12	10	12	9	11	8	9 1/2	6 1/2	7 1/2	5	6	4	4 1/2	3	3 1/2
12	10	12	10	12	10	12	8 1/2	10	7	8 1/2	5 1/2	6 1/2	4	5	3	3 1/2
11 1/2	9 1/2	11 1/2	9 1/2	11 1/2	9 1/2	11 1/2	8 1/2	10	7	8 1/2	5 1/2	6 1/2	4	5	3 1/2	3 1/2
11 1/2	9 1/2	11 1/2	9 1/2	11 1/2	9 1/2	11 1/2	8	9 1/2	7	8	5 1/2	6 1/2	4	5	2 1/2	3
10	9	10	9	10	9	10	7 1/2	9	6 1/2	7 1/2	5	6	4	4 1/2	3	3 1/2
11	9	10 1/2	8 1/2	10	8 1/2	10	7	8	6	7	4 1/2	5 1/2	3 1/2	4 1/2	2 1/2	3
11	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
11 1/2	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
11	9	11	9	11	9	11	8	9 1/2	6 1/2	7 1/2	5	6	4	4 1/2	3	3 1/2
11	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
11	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
9	9	9	9	9	9	9	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7	5	6	4	4 1/2	2 1/2	3
9	8 1/2	9	8 1/2	9	8 1/2	9	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7 1/2	9	6 1/2	7 1/2	5	6	4	5	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
9	9	9	9	9	9	9	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
9	8 1/2	9	8 1/2	9	8 1/2	9	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2
10	8 1/2	10	8 1/2	10	8 1/2	10	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2

TABLE IV. — *Minimum Weekly Wages and Overtime*

District Wages Committee Areas	Minimum weekly wages at various ages									
	Over 21	20-21	19-20	18-19	17-18	16-17	15-16	14-15		
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Northumberland and Durham	42 6	41 0	40 0	36 0	28 0	23 0	18 0	14 0		
Glamorgan and Monmouth	41 6	38 6	37 6	33 6	28 6	24 6	21 0	18 0		
Yorkshire	41 0	39 6	38 6	37 6	30 0	25 0	20 0	15 0		
Middlesex	40 6	36 0	35 0	34 0	26 0	22 0	18 0	14 0		
Lincolnshire	40 6	35 0	34 0	33 0	26 0	22 0	18 0	14 0		
Lancashire (except Furness District)	39 6	38 0	37 0	36 0	30 0	25 0	20 0	15 0		
Kent	39 6	38 0	37 0	36 0	28 0	23 0	18 0	14 0		
Surrey	39 6	36 0	35 0	34 0	26 0	22 0	18 0	14 0		
Hertfordshire	38 6	36 0	35 0	34 0	26 0	22 0	18 0	14 0		
Staffordshire	38 6	36 0	33 0	32 0	26 0	22 0	18 0	14 0		
Essex; Sussex	38 6	35 0	34 0	33 0	26 0	22 0	18 0	14 0		
Cheshire	38 0	36 6	35 6	34 6	31 0	26 0	21 0	16 0		
Nottinghamshire	38 0	36 6	35 6	34 6	30 0	25 0	20 0	15 0		
Cornwall; Derbyshire; Devonshire; Hampshire; Leicestershire and Rutland	37 6	36 0	35 0	34 0	26 0	22 0	18 0	14 0		
Pembroke, Carmarthen and Cardigan	37 6	35 0	34 0	33 0	26 0	22 0	18 0	14 0		
Shropshire	37 0	33 6	32 6	31 6	26 0	22 0	18 0	14 0		
Anglesey and Caernarvon	36 6	35 0	34 0	33 0	26 0	22 0	18 0	14 0		
Oxfordshire	36 6	35 0	34 0	33 0	26 0	22 0	18 0	14 0		
Berkshire; Brecon and Radnor; Buckinghamshire; Cambridgeshire, Huntingdonshire and Bedfordshire; Denbigh and Flint; Dorset; Gloucestershire; Herefordshire; Norfolk; Northamptonshire; Somerset; Suffolk; Warwickshire; Wiltshire; Worcestershire	36 6	35 0	34 0	33 0	26 0	22 0	18 0	14 0		
Merioneth and Montgomery	36 6	35 0	34 0	33 0	25 0	20 0	18 0	14 0		
Cumberland, Westmoreland and Furness District of Lancashire	35 0	35 0	35 0	35 0	30 0	25 0	20 0	15 0		

Ordinary Male Workers in force on 19 May 1919.

Overtime rates at various ages																							
Age	20-21			19-20			18-19			17-18			16-17			15-16			14-15			Under 14	
	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	
14	11 1/2	13 1/2	11	13	10	12	8	9 1/2	6 1/2	7 1/2	5	6	4	4 1/2	3	3 1/2							
14	10 1/2	13	10 1/2	13	9 1/2	11	7 1/2	9	6 1/2	7 1/2	5 1/2	6 1/2	4 1/2	5 1/2	2 1/2	3							
13 1/2	11	13	10 1/2	13	10 1/2	12 1/2	8 1/2	10	7	8 1/2	5 1/2	6 1/2	4	5	3 1/2	3 1/2							
13 1/2	10	12	9 1/2	11 1/2	9 1/2	11 1/2	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2							
13 1/2	9 1/2	11 1/2	9 1/2	11 1/2	9	11	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2							
13	10 1/2	12 1/2	10 1/2	12 1/2	10	12	8	9 1/2	7	8	5 1/2	6 1/2	4	5	2 1/2	3							
13	10 1/2	12 1/2	10 1/2	12 1/2	10	12	8	9 1/2	6 1/2	7 1/2	5	6	4	4 1/2	3	3 1/2							
13	10	12	9 1/2	11 1/2	9 1/2	11 1/2	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2							
13	10 1/2	12 1/2	10 1/2	12 1/2	10	12	8	9 1/2	6 1/2	7 1/2	5	6	4	4 1/2	3	3 1/2							
13	10	12	9	11	9	10 1/2	7	8	6	7	4 1/2	5 1/2	3 1/2	4 1/2	2 1/2	3							
13	9 1/2	11 1/2	9 1/2	11 1/2	9	11	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2							
12 1/2	10	12	10	12	9 1/2	11 1/2	8	9 1/2	6 1/2	8	5	6 1/2	4	5	3	3 1/2							
12 1/2	10	12	10	12	9 1/2	11 1/2	7 1/2	9	6 1/2	7 1/2	5	6	4	4 1/2	3	3 1/2							
12 1/2	10	12	9 1/2	11 1/2	9 1/2	11 1/2	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2							
12 1/2	9 1/2	11 1/2	9 1/2	11 1/2	9	11	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2							
12 1/2	9 1/2	11 1/2	9	11	9	10 1/2	7	8	6	7	4 1/2	5 1/2	3 1/2	4 1/2	2 1/2	3 1/2							
12	9 1/2	11 1/2	9 1/2	11 1/2	9	11	7	8 1/2	6	7	5	6	4	4 1/2	3	4							
12	9 1/2	11 1/2	9 1/2	11 1/2	9	11	7 1/2	9	6 1/2	7 1/2	5	6	4	4 1/2	3	3 1/2							
12	9 1/2	11 1/2	9 1/2	11 1/2	9	11	7	8 1/2	6	7 1/2	5	6	4	4 1/2	3	3 1/2							
12	9 1/2	11 1/2	9 1/2	11 1/2	9	11	7	8 1/2	5 1/2	6 1/2	5	6	4	4 1/2	3	3 1/2							
12	10	12	10	12	10	12	8 1/2	10	7	8 1/2	5 1/2	6 1/2	4	5	3	3 1/2							

and Summer: Over 21 years, 42s. 6d.; from 20 to 21 years, 41s.; from 19 to 20 years, 39s.; from 18 to 19 years, 39s.; from 17 to 18 years, 31s.; from 16 to 17 years, 26s.; from 15 to 16 years, 21s.; from 14 to 15 years, 16s.; under 14 years, 11s. The corresponding overtime rates for weekdays and Sundays were: Over 21 years, 1s. and 1s. 2d.; from 20 to 21 years, 11 ½d. and 1s. 1 ½d.; from 19 to 20 years, 11d. and 1s. 1 ½d.; from 18 to 19 years, 11d. and 1s. 1d.; from 17 to 18 years, 8d. and 9 ½d.; from 16 to 17 years, 6 ½d. and 8d.; from 15 to 16 years, 5d. and 6 ½d.; from 14 to 15 years, 4d. and 5d.; under 14 years, 3d. and 3 ½d.

By an Order which came into force on 19 April 1920, the minimum rates of wages for ordinary male workers over 21 years of age were modified, while those for ordinary male workers under that age (except in Cheshire) were modified by an Order which came into force on 31 May 1920. For Cheshire the minimum rates for all ordinary male workers were modified by an Order which came into force on 12 July 1920. Table V (pages 545-546) shows the results of these successive modifications.

The wages shown in Table V were in respect of a week of 50 hours in Summer and 48 hours in Winter, except in Cheshire, where they applied to a week of 54 hours, Summer and Winter.

In most counties the overtime rates applied to all employment on a Sunday, all employment in excess of 6 ½ hours on the short day and all employment in any week (excluding Sunday) in excess of the hours in respect of which the minimum weekly wages were payable. To this there were some exceptions. In Cumberland, Westmoreland and the Furness District of Lancashire, in Anglesey and Carnarvon, in Brecon and Radnor, in Denbigh and Flint, and in Merioneth and Montgomery the employment in excess of 6 ½ hours on the short day was not calculated as overtime in the case of any workman who, under an agreement with his employer was entitled in each half-year to one week's holiday on full pay or to payment of double pay for one week's work. In Northumberland and Durham, in Yorkshire, and in Glamorgan and Monmouth, employment in excess of 6 ½ hours on the short day was not calculated as overtime in the case of any worker who under an agreement with his employer was entitled to one week's holiday on full pay in each half-year, or to one fortnight's holiday on full pay in each year or to payment of double pay for one week's work in each half-year or for one fortnight's work in each year. In Pembrokeshire, Carmarthen and Cardigan employment in excess of 6 ½ hours on the short day was not calculated as overtime in the case of any workman who under agreement with his employer was entitled in each year either to one fortnight's holiday (or to holidays amounting to 12 weekdays) on full pay or to payment of double pay for a fortnight's work in each year. In Cheshire overtime employment was all employment on Sunday, all employment in excess of 6 ½ hours on the short day and all employment in excess of 9 ½ hours on any other day.

By an Order which came into force on 23 August 1920, the minimum rates of wages for ordinary male workers over 21 years of age were further revised, and by an Order which came into force on 1 March 1921,

the wages for ordinary male workers over 17 years of age in some counties and over 18 years in others were also revised. In neither case was any change made in the number of hours to which the rate applied, nor to the methods of calculating overtime. The rates in force on 1 March 1921 are shown in Table VI (pages 544-545).

Hitherto in each successive change the minimum rate of wages had been increased, but by an Order which came into operation on 5 September 1921 a general reduction was made in the rates for ordinary male workers. At the same time the opportunity was taken of making the rates more nearly uniform in the different areas. The reduced rates are shown in Table VII (pages 546-547).

§ 8. MINIMUM WAGES FOR SPECIAL CLASSES OF MALE WORKERS.

Besides the minimum wages for ordinary male workers, minimum wages were fixed in various areas for certain special classes of male workers. There were considerable variations at different periods in the wages fixed for special classes of workers, and with the increase in the wages of ordinary male workers many of the special classes were afterwards assimilated to them.

Another important change was the determination of the number of hours for which the minimum wages were payable. In most of the earlier Orders no definite number of hours per week was assigned, the number being taken as the "customary" number of hours per week worked by the special classes of labourers. The customary number is very variable and differs in different districts in the same county. This method of determining wages was not considered satisfactory and the later Orders defined the number of hours per week. This did not mean that any change was made in the number of hours actually worked; it only made a change in the hours which were to be considered overtime. In some counties, where the customary hours were longer than the hours fixed, the minimum weekly wage was diminished; the worker did not, however, earn less as he was paid overtime for the hours actually worked.

The minimum wages and overtime rates which had been fixed up to 1 January 1919 for special classes and the hours to which the minimum wages were applicable are shown in Table VIII (pages 548-549).

The number of hours per week in respect of which the minimum wages were payable, whether the "customary" hours or a determined number, included work on Sunday, and the overtime rates were payable for all employment during the week in excess of that number of hours, on weekdays and on Sundays respectively.

In addition to the rates shown in Table VIII, minimum wages had been fixed in Northumberland and Durham for horsemen, cattlemen, and stockmen between 16 and 18 years. These were: From 17 to 18 years, 30s.; from 16 to 17 years, 25s. The corresponding overtime rates were: From 17 to 18 years, weekdays, 8d., Sundays, 9 ½d.; from 16 to 17 years, weekdays, 6 ½d., Sundays, 7 ½d.

TABLE V. — *Minimum Weekly Wages and Overtime*

District Wages Committee Areas	Minimum weekly wages at various ages									
	Over 21	20-21	19-20	18-19	17-18	16-17	15-16	14-15		
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Cheshire	48 0	46 0	44 0	42 6	34 0	28 0	22 6	17 0		
Northumberland and Durham	46 6	44 0	41 6	40 0	32 0	26 6	21 6	16 6		
Glamorgan and Monmouth . .	45 6	44 0	41 6	40 0	32 0	26 6	21 6	16 6		
Yorkshire	45 0	43 0	40 6	39 0	31 0	25 6	21 0	16 0		
Lincolnshire; Middlesex . . .	44 6	43 0	40 6	39 0	31 0	25 6	21 0	16 0		
Cumberland, Westmoreland and Furness District of Lancashire	44 0	42 0	40 0	38 0	30 6	25 0	20 6	15 6		
Kent; Lancashire (except Furness District); Surrey	43 6	42 0	40 0	38 0	30 6	25 0	20 6	15 6		
Essex; Hertfordshire; Staffordshire; Sussex	42 6	40 0	38 0	36 6	29 0	24 0	19 6	15 0		
Anglesey and Carnarvon . . .	42 0	40 0	38 0	36 6	29 0	24 0	19 6	15 0		
All other District Wages Committee Areas	42 0	40 0	38 0	36 6	29 0	24 0	19 6	15 0		

TABLE VI. — *Minimum Weekly Wages and Overtime*

District Wages Committee Areas	Minimum weekly wages at various ages									
	Over 21	20-21	19-20	18-19	17-18	16-17	15-16	14-15		
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Cheshire	52 0	49 0	46 6	44 6	35 6	28 0	22 6	17 0		
Northumberland and Durham	50 6	46 6	43 6	41 0	32 0	26 6	21 6	16 6		
Glamorgan and Monmouth . .	50 0	46 6	43 6	41 0	32 0	26 6	21 6	16 6		
Yorkshire	49 0	45 6	42 6	40 0	31 0	25 6	21 0	16 0		
Lincolnshire; Middlesex . . .	48 6	45 6	42 6	40 0	31 0	25 6	21 0	16 0		
Cumberland, Westmoreland and Furness District of Lancashire	48 0	44 6	42 0	39 0	30 6	25 0	20 6	15 6		
Kent; Lancashire (except Furness District); Surrey . . .	47 6	44 6	42 0	39 0	30 6	25 0	20 6	15 6		
Essex; Hertfordshire; Staffordshire; Sussex	46 6	43 0	40 6	38 6	30 6	24 0	19 6	15 0		
Anglesey and Carnarvon . . .	46 0	43 0	40 6	38 6	30 6	24 0	19 6	15 0		
All other District Wages Committee Areas	46 0	43 0	40 6	38 6	30 6	24 0	19 6	15 0		

Ordinary Male Workers in force on 12 July 1920.

Overtime rates at various ages																		
	20-21		19-20		18-19		17-18		16-17		15-16		14-15		Under 14			
	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays		
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.		
16	13	15 ¹ / ₂	12	14 ¹ / ₂	12	14	9 ¹ / ₂	11	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		
17	13 ¹ / ₄	16	12 ¹ / ₂	15	12	14	9 ¹ / ₂	11 ¹ / ₂	8	9 ¹ / ₂	6 ¹ / ₂	8	5	6	3	3 ¹ / ₂		
16 ¹ / ₂	13 ¹ / ₂	16	12 ¹ / ₂	15	12	14 ¹ / ₂	9 ¹ / ₂	11 ¹ / ₂	8	9 ¹ / ₂	6 ¹ / ₂	8	5	6	3	3 ¹ / ₂		
16	13	15 ¹ / ₂	12 ¹ / ₂	15	12	14	9 ¹ / ₂	11 ¹ / ₂	8	9 ¹ / ₂	6 ¹ / ₂	7 ¹ / ₂	5	6	3	3 ¹ / ₂		
16	13	15 ¹ / ₂	12 ¹ / ₂	15	12	14	9 ¹ / ₂	11 ¹ / ₂	8	9 ¹ / ₂	6 ¹ / ₂	7 ¹ / ₂	5	6	3	3 ¹ / ₂		
16	13	15 ¹ / ₂	12	14 ¹ / ₂	11 ¹ / ₂	14	9 ¹ / ₂	11	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		
16	13	15 ¹ / ₂	12	14 ¹ / ₂	11 ¹ / ₂	14	9 ¹ / ₂	11	7 ¹ / ₂	9	6	7 ¹ / ₂	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		
15 ¹ / ₂	12	14 ¹ / ₂	11 ¹ / ₂	14	11	13 ¹ / ₂	9	10 ¹ / ₂	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		
15 ¹ / ₂	12	14 ¹ / ₂	11 ¹ / ₂	14	11	13 ¹ / ₂	9	10 ¹ / ₂	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	4		
15 ¹ / ₂	12	14 ¹ / ₂	11 ¹ / ₂	14	11	13 ¹ / ₂	9	10 ¹ / ₂	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		

Ordinary Male Workers in force on 1 March 1921.

Overtime rates at various ages																		
Over 11	20-21		19-20		18-19		17-18		16-17		15-16		14-15		Under 14			
	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays		
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.		
17 ¹ / ₂	13 ¹ / ₂	16 ¹ / ₂	13	15 ¹ / ₂	12 ¹ / ₂	15	10	12	8	9 ¹ / ₂	6 ¹ / ₂	7 ¹ / ₂	5	5 ¹ / ₂	3	3 ¹ / ₂		
18 ¹ / ₂	14	17	13	16	12 ¹ / ₂	15	9 ¹ / ₂	11 ¹ / ₂	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		
18	14	17	13	16	12 ¹ / ₂	15	9 ¹ / ₂	11 ¹ / ₂	8	9 ¹ / ₂	6 ¹ / ₂	8	5	6	3	3 ¹ / ₂		
18	14	16 ¹ / ₂	13	15 ¹ / ₂	12	14 ¹ / ₂	9 ¹ / ₂	11 ¹ / ₂	8	9 ¹ / ₂	6 ¹ / ₂	7 ¹ / ₂	5	6	3	3 ¹ / ₂		
17 ¹ / ₂	14	16 ¹ / ₂	13	15 ¹ / ₂	12	14 ¹ / ₂	9 ¹ / ₂	11 ¹ / ₂	8	9 ¹ / ₂	6 ¹ / ₂	7 ¹ / ₂	5	6	3	3 ¹ / ₂		
17 ¹ / ₂	13 ¹ / ₂	16	13	15 ¹ / ₂	12	14	9 ¹ / ₂	11	7 ¹ / ₂	9	6	7 ¹ / ₂	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		
17 ¹ / ₂	13 ¹ / ₂	16	13	15 ¹ / ₂	12	14	9 ¹ / ₂	11	7 ¹ / ₂	9	6	7 ¹ / ₂	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		
17	13 ¹ / ₂	15 ¹ / ₂	12 ¹ / ₂	15	11 ¹ / ₂	14	9 ¹ / ₂	11	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		
17	13	15 ¹ / ₂	12 ¹ / ₂	15	11 ¹ / ₂	14	9 ¹ / ₂	11	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	4		
17	13	15 ¹ / ₂	12 ¹ / ₂	15	11 ¹ / ₂	14	9 ¹ / ₂	11	7 ¹ / ₂	9	6	7	4 ¹ / ₂	5 ¹ / ₂	3	3 ¹ / ₂		

TABLE VII. — *Minimum Weekly Wages and Overtime*

District Wages Committee Areas	Minimum weekly wages at various ages											
	Over 21	20-21	19-20	18-19	17-18	16-17	15-16	14-15				
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Cheshire	47 0	44 6	42 0	40 0	32 0	26 0	21 0	16 0				
Cumberland and Durham	46 6	41 0	38 6	36 0	28 0	23 6	19 0	14 6				
Glamorgan and Monmouth	44 0	41 0	38 6	36 0	28 0	23 6	19 0	14 6				
Yorkshire	43 0	40 0	37 6	35 0	28 0	22 6	18 6	15 0				
Lincolnshire ; Middlesex	42 6	40 0	37 0	35 0	28 0	22 6	18 6	14 0				
All other District Wages Committee Areas	42 0	40 0	37 0	35 0	28 0	22 6	18 6	15 0				

The Order which came into force on 19 May 1919 varying the minimum wages of workers over 18 years of age affected the special classes of workers as well as the ordinary male workers. The resulting minimum wages and overtime rates for the special classes in force on 19 May 1919 are shown in Table IX (pages 548-549).

Overtime was calculated in the same way as for ordinary male workers at the same date.

By the Order which came into force on 6 October 1919, the special classes of workers were in some counties assimilated to the ordinary male workers; in others the number of hours per week for which the minimum wage was payable was definitively fixed and the minimum wage was varied accordingly. For Cheshire a special order was issued which came into operation on 27 October 1919. The rates in force on the latter date are shown in Table X (pages 550-551).

The methods of calculating overtime varied considerably. In Cambridgeshire, Huntingdonshire and Bedfordshire, overtime was reckoned as all employment in excess of the specified hours in any week (including Sunday) and any employment in excess of 6 ½ hours on the short day, except employment in connection with the feeding and cleaning of stock.

In Cheshire the method of reckoning overtime was the same for the special classes as for the ordinary male workers in that county.

In Cumberland, Westmoreland and the Furness District of Lancashire overtime was all employment in excess of 63 hours in any week (including Sunday) and any employment in excess of 6 ½ hours on the short day except employment in connection with the feeding and cleaning of stock.

Ordinary Male Workers in force on 5 September 1921.

Overtime rates at various ages																
Over 18	20-21		19-20		18-19		17-18		16-17		15-16		14-15		Under 14	
	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays
d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
15½	12½	15	11½	14	11	13½	9	10½	7	8½	6	7	4½	5½	3	3½
16	12½	15	11½	14	11	13	8½	10	7	8½	6	7	4½	5	3	3½
16	12½	15	11½	14	11	13	8½	10	6½	8	5½	6½	4½	5	3	3½
15½	12	14½	11½	13	10½	13	8½	10	7	8	5½	7	4½	5½	3	3½
15½	12	14½	11	13½	10½	13	8½	10	6½	8	5½	6½	4½	5	3	3½
15½	12	14	11	13½	10½	13	8½	10	6½	8	5½	6½	4½	5	3	3½

The provision relating to the short day was not, however, to apply in the case of a workman who, under an agreement with his employer, was entitled after having been employed for a full term (expiring at Whitsuntide or Martinmas) to a further sum equal to the amount of his weekly minimum wage.

In Denbigh and Flint and in Merioneth and Montgomery overtime was reckoned as all employment in excess of 6 ½ hours on the short day, and all employment in excess of the specified hours in any week (including Sunday). The provision relating to the short day was not to apply in the case of any workman who under an agreement with his employer was entitled in each half-year either to one week's holiday on full pay or to payment of double pay for one week's work.

For market garden workers in Essex, the number of hours per week was exclusive of Sunday and overtime was calculated as all employment on a Sunday, all employment in excess of 6 ½ hours on the short day, and all employment in excess of the specified hours in any week (excluding Sunday).

In Gloucestershire overtime was reckoned as all employment in excess of the specified number of hours in any week (including Sunday) and all employment in excess of 6 ½ hours on the short day, except employment in connection with the feeding and cleaning of stock.

In Norfolk overtime was reckoned as all employment on Sunday, all employment in excess of 6 ½ hours on the short day except employment in connection with the immediate care of animals, and all employment in any week (excluding Sunday) in excess of the specified hours. Teamsmen,

TABLE VIII. — *Minimum Weekly Wages and Overtime Rates for Special Classes of Workers in force on 1 January 1919.*

[illegible]

[illegible]

TABLE IX. — Minimum Weekly Wages and Overtime Rates for Special Classes of Workers in force on 19 May 1919.

Districts Wages Committee Area and Class of Worker	Minimum weekly wage at various ages				Number of hours per week for which minimum wage was payable	Overtime rates at various ages						
	Over 21	30-31	19-20	18-19		Summer	Winter	Week- days	Over 21 Week- days	20-21 Week- days	19-20 Week- days	18-19 Week- days
NORTHUMBRIA AND DURHAM: Whole time shepherd	s. d.	s. d.	s. d.	s. d.	Custom- ary	Custom- ary	12 14	11 ¹ / ₂ 13 ¹ / ₂	11 ¹ / ₂ 13 ¹ / ₂	10 12	...	
Horseman, cattleman, stockman	49 6	48 0	47 0	..	?	?	12 14	11 ¹ / ₂ 13 ¹ / ₂	11 13	10 ¹ / ₂ 12	...	
CUMBERLAND, WESTMORELAND AND FURNESS DIS- TRICT OF LANCASHIRE: Horseman, cattleman, shepherd	48 6	47 0	46 0	45 0	?	?	11 ¹ / ₂ 14	11 13 ¹ / ₂	11 13	10 ¹ / ₂ 12 ¹ / ₂	10 ¹ / ₂ 12 ¹ / ₂	
YORKSHIRE: Horseman, cowman, shepherd	47 0	43 6	42 6	41 6	?	?	11 ¹ / ₂ 13 ¹ / ₂	11 13	10 ¹ / ₂ 13	10 ¹ / ₂ 12 ¹ / ₂	10 ¹ / ₂ 12 ¹ / ₂	
LINCOLNSHIRE: Stockman, teamman, shepherd	46 6	41 0	40 0	39 0	?	?	11 ¹ / ₂ 13 ¹ / ₂	9 ¹ / ₂ 11 ¹ / ₂	9 ¹ / ₂ 11 ¹ / ₂	9 11	...	
ESSEX: Market garden workers	42 6	..	..	..	54	48	10 ¹ / ₂ 13	..	..	..	...
CHESHIRE: Head stockman, head teamman, head shepherd Second stockman, second teamman, second shepherd	42 0	40 6	39 6	38 6	54	48	10 ¹ / ₂ 12 ¹ / ₂	10 12	10 12	9 ¹ / ₂ 11 ¹ / ₂	9 ¹ / ₂ 11 ¹ / ₂	
DERBYSHIRE: Stockman, horseman, shepherd	40 0	38 6	37 6	36 6	54	48	9 ¹ / ₂ 11 ¹ / ₂	10 ¹ / ₂ 12 ¹ / ₂	10 12	9 ¹ / ₂ 11 ¹ / ₂	9 ¹ / ₂ 11 ¹ / ₂	
	42 6	41 0	40 0	39 0	Custom- ary not pay	Custom- ary not pay	10 ¹ / ₂ 12 ¹ / ₂	10 12	9 ¹ / ₂ 11 ¹ / ₂	9 ¹ / ₂ 11 ¹ / ₂	9 ¹ / ₂ 11 ¹ / ₂	

	43	6	42	0	41	0	40	Custom- ary	Custom- ary	10 ¹ /11 ¹ / ₂ to 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
Carter, dairyman, cowman, shepherd	41	0	39	6	38	6	37	6	61	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
ANGLESEY AND CARNARVON :											
Horseman, cowman, shepherd, hwsmon (bail- iff)	43	6	42	0	41	0	40	0	Custom- ary	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
BREKESHIRE :											
Head carter, head cowman	41	6	40	0	39	0	38	0	Custom- ary	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
Head shepherd	40	6	39	0	38	0	37	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
Under cowman	39	6	38	0	37	0	36	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
Under carter, under shepherd	42	6	41	0	40	0	39	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
CAMBRIDGESHIRE, HUNTINGDONSHIRE AND BED- FORDSHIRE :											
Horseman, cowman, shepherd	41	6	40	0	39	0	38	0	"	11 ¹ /11 ¹ / ₂	10 ¹ /11 ¹ / ₂
DENVICH AND FLINT :											
Teamman, cattlemán, cowman, shepherd, bail- iff	42	6	41	0	40	0	39	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
DORSET :											
Carter, cowman, shepherd	43	6	42	0	41	0	40	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
GLOUCESTERSHIRE :											
Stockman, horseman, shepherd	40	6	39	0	38	0	37	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
Under stockman, under horseman, under shep- herd	42	6	41	0	40	0	39	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
NORFOLK :											
Teamman, shepherd, cowman	41	6	40	0	39	0	38	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
Sheep tender, bullock tender	42	6	41	0	40	0	39	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
SUFFOLK :											
Horseman, stockman, shepherd	44	6	43	0	42	0	41	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
WARWICKSHIRE :											
Stockman, shepherd, horseman	41	6	40	0	39	0	38	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂
MERIONETH AND MONTGOMERY :											
Stockman, teamster, carter, shepherd	42	6	41	0	40	0	39	0	"	10 12	9 ¹ /11 ¹ / ₂ 9 ¹ /11 ¹ / ₂

TABLE X. — Minimum Weekly Wages and Overtime Rates for Special Classes of Workers in force on 27 October 1919.

Districts Wages Committee Area and Class of Worker	Minimum weekly wages at various ages				Number of hours per week for which minimum wage was payable		Overtime rates at various ages							
							Over 21		20-21		19-20		18-19	
	Over 21	20-21	19-20	18-19	Summer	Winter	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays
NORTHERN IRELAND AND DUBLIN: Whole-time shepherd . . .	49	6	48	0	47	0	...	...	...	...	...	...	...	...
CORNWALL, WEST HANTS AND WILT: Head stockman, head shepherd	50	6	49	6	48	0	63	11 13%	11 13	10% 13	10% 13	10% 13	10% 13	10% 13
ESSEX: Market garden workers . . .	42	6	...	...	...	...	50	10% 13	12% 15	12 14%	12 14%	12 14%	12 14%	12 14%
CHESHIRE: Head stockman, head shepherd . . .	46	6	45	0	44	0	54	12% 15	12 14%	12 14%	12 14%	12 14%	12 14%	12 14%
Second stockman, second shepherd . . .	44	6	43	0	42	0	54	12% 15	12 14%	12 14%	12 14%	12 14%	12 14%	12 14%
CAMBRIDGESHIRE AND BEDFORDSHIRE: Head stockman, head shepherd	44	6	42	6	41	6	59	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
Horse-leech . . .	43	6	42	0	41	0	57	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
DEVON AND GLouc: Teamsters, cattlemen, cowmen, shepherds, bailiffs . . .	43	6	42	0	41	0	61	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
GLoucestershire: Horseman . . .	45	6	43	0	42	0	63	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
Under horseman . . .	41	6	40	0	39	0	57	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
Under stockman, under shepherd . . .	43	6	42	0	41	0	60	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
NORFOLK (1): Teamster, cowman, shepherd . . .	36	6	35	0	34	0	50	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
ROSEY (2): Horse stockman, shepherd . . .	36	6	35	0	34	0	50	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
WARWICKSHIRE: Stockman, shepherd, horseman . . .	36	6	35	0	34	0	50	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
MERIONETH AND MONTGOMERY: Stockman, teamster, carter, shepherd . . .	44	6	41	0	40	0	58	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11
	43	6	41	6	40	6	61	10 12	9% 11%	9% 11%	9 11	9 11	9 11	9 11

(1) To the minimum wages of teamsters, cowmen and shepherds was to be added a weekly sum of 7s. and to those of sheep-tenders and bullock-tenders a weekly sum of 6s. in respect of employment in connection with the immediate care of animals which was precluded from ranking as overtime employment on the short day. — (2) To the minimum wages of horsemen, stockmen and shepherds was to be added a weekly sum of 7s. in respect of similar employment.

cowmen and shepherds were, however, entitled to an additional weekly sum of 7s., and sheep-tenders and bullock-tenders to an additional weekly sum of 6s. in respect of the employment which was precluded from ranking as overtime employment on the short day.

In Suffolk overtime was reckoned in the same manner as in Norfolk, and horsemen, stockmen and shepherds were entitled to an additional weekly sum of 7s. in respect of employment which was precluded from ranking as overtime employment on the short day.

In Warwickshire, overtime was calculated as all employment in excess of 6 $\frac{1}{2}$ hours on the short day except employment in connection with the feeding and cleaning of stock and all employment in excess of the specified hours in any week (including Sunday).

Special minimum rates of wages for horsemen, cowmen, shepherds and hwsmyrn (bailiffs) in Anglesey and Carnarvon were again fixed by an Order which came into operation on 1 March 1920. The Order which came into force on 19 April 1920 varying the minimum rates of wages of male workers of 21 years and over affected the special classes of workers as well as the ordinary male workers.

On 3 May 1920 an Order came into force varying the minimum rates of wages for horsemen, stockmen and shepherds in Suffolk. The minimum rates for male workers (including the special classes) under 21 years of age were modified by the Order which came into force on 31 May 1920. On 14 June 1920 an Order came into force whereby stockmen, shepherds and horsemen in Warwickshire were assimilated to the ordinary male workers. The minimum rates for male workers (including the special classes) of all ages in Cheshire were varied by an Order which came into force on 12 July 1920. The minimum wages and overtime rates for special classes of workers which, as a result of these various orders, were in force on 12 July 1920, are shown in Table XI (page 554).

In Anglesey and Carnarvon overtime was reckoned as all employment in excess of the specified number of hours in any week (including Sunday) and all employment in excess of 6 $\frac{1}{2}$ hours on the short day except employment in connection with the feeding and cleaning of stock, but the provision relating to the short day was not to apply in the case of any workman who, under an agreement with his employer, was entitled in each half-year either to one week's holiday on full pay, or to payment of double pay for one week's work.

The minimum rates of wages of the special classes of workers above 21 years were modified (like those of ordinary male workers) by the Order which came into operation on 23 August 1920 and those for workers under 21 years of age belonging to the special classes by the Order which came into force on 1 March 1921. The resulting minimum wages and overtime rates in force on 1 March 1921 are shown in Table XII (page 555).

Finally the minimum wages of the special classes were reduced by the Order which came into operation on 5 September 1921. The rates for special workers in force on that date are shown in Table XIII (page 556).

TABLE XII. — *Minimum Weekly Wages and Overtime Rates for Special Classes of Workers in force on 1 March 1921.*

[illegible]

(3) To the minimum wages of teamsters, cowmen and sheepherds was to be added a weekly sum of gr. 64, and to those of bullock-tenders and sheep-tenders a weekly sum of 88. 67, in respect of the employment indicated in note (1) of Table X. --- (2) To the minimum wages of horsemen, stockmen and sheepherds was to be added a weekly sum of gr. 64, in respect of the employment indicated in note (1) of Table X.

TABLE XIII. — *Minimum Weekly Wages and Overtime Rates for Special Classes of Workers in force on 5 September 1921.*

Districts Wages Committee Area and Class of Worker	Minimum weekly wages at various ages				Number of hours per week for which minimum wage was payable	Overtime rates at various ages									
	Over 21	20-21		19-20		18-19		Over 21	20-21		19-20		18-19		
		s. d.	s. d.	s. d.		s. d.	Weekdays		Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays
CHESHIRE: Head stockman, head shepherd. Second stockman, second shepherd. NORTHAMPTON AND DUNHAM: Whole-time shepherds. AVON: Head stockman, head shepherd. AVON: Head stockman, head shepherd, hawman (baillif). CAMBERGESHIRE, HUNTINGDONSHIRE AND BEDFORDSHIRE: Head stockman, head shepherd. DENBIGH AND DENBIGH: Teasman, cattleman, cowman, horsekeeper, cowman, shepherd. ESSEX: Market garden worker. GLoucestershire: Horseman. Stockman, shepherd. Under horseman. Under stockman, under shepherd. MERTON AND MONTGOMERY: Teasman, transfer, carter, shepherd. NORFOLK (1): Teasman, cowman, shepherd. Sheep-tender, bullock-tender. SURREY (2): Horseman, stockman, shepherd.	51 49 54 53 53 51 53 51 53 53 50 48 50 42 42 42	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	48 46 51 50 50 48 50 48 50 48 45 44 44 39 39 39	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	54 54 54 61 59 57 61 58 60 60 54 57 57 56 53 50 50 50 48	Customary	14 13 13 13 13 13 13 13 13 13 13 13 13 13 13 13 13 13	17 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16 16	13 13 13 13 13 13 13 13 13 13 13 13 13 13 13 13 13 13	16 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15	13 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12	13 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12	12 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11	13 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12	

(1) To the minimum wages of teasman, cowman and shepherds was to be added a weekly sum of 8s. 6d. and to those of bullock-tenders and sheep-tenders a weekly sum of 7s. 6d. in respect of the employment indicated in note (1) of Table XI. — (2) To the minimum wages of horsemen, stockmen and shepherds was to be added a weekly sum of 9s. in respect of the employment indicated in note (1) of Table XI.

In Merioneth and Montgomery minimum wages and overtime rates were also fixed (and from time to time varied) for boys under 18 years of age who were wholly or partially boarded by their employers and whose duties included attending to horses and other stock. In Brecon and Radnor minimum wages and overtime rates were fixed for the same class, but did not remain long in force, this class of boys being assimilated to other male workers of the same ages. The minimum wages in force at different dates for this special class are given in Table XIV (page 558). The number of hours per week to which the rates applied included Sunday.

§ 9. MINIMUM WAGES FOR FEMALE WORKERS.

As an almost invariable rule minimum and overtime rates per hour were fixed for female workers. The only exception to this was in Northumberland, where at first minimum weekly wages were fixed for female workers employed by the week or longer period. These wages, which came into force on 21 October 1918 were as follows: Over 18 years, 22s. 6d.; 17 to 18 years, 20s. 3d.; 16 to 17 years, 18s.; 15 to 16 years 15s. 9d.; 14 to 15 years, 13s. 6d.; under 14 years, 11s. 3d. The number of hours per week to which these wages applied was 54 (excluding Sunday) in Summer and 48 (excluding Sunday) in Winter. The corresponding overtime rates were: Over 18 years, weekdays, 6d., Sunday, 7 ½d.; 17 to 18 years, 5 ½d. and 7d.; 16 to 17 years, 5d. and 6d.; 15 to 16 years, 4 ½d. to 5d.; 14 to 15 years, 4d. and 4 ½d.; under 14, 3d. and 4d. Overtime was reckoned as all employment on Sunday and all employment in excess of the specified number of hours in any week (excluding Sunday). When the short day was introduced, any employment on the short day in excess of 6 ½ hours was also reckoned as overtime.

These minimum wages were, however, subsequently cancelled and the minimum rates of wages per hour which had been fixed were made applicable to all female workers in Northumberland.

In Table XV (page 559) we give the minimum rates per hour and overtime rates for female workers at different dates. It will be seen that the wages fixed were at all times very nearly uniform throughout England and Wales. In the first and second Orders, which came into operation on 21 October 1918 and 14 July 1919, only Cumberland, Westmorland and the Furness District of Lancashire, and Yorkshire, had higher rates than the general rate. By the Order which came into force on 31 May 1920 the rates in Cumberland, Westmorland and the Furness District of Lancashire were assimilated to the general rate, but special rates were fixed for Somerset and for Yorkshire. In the Orders which came into force on 1 March 1921 and 5 September 1921 special rates were fixed only for Yorkshire. As in the case of male workers, the Order which came into force on 5 September 1921 reduced the rates previously fixed.

In the earliest Order relating to female workers overtime was defined as all employment on a Sunday, all employment on any week-day before 7 a. m. or after 5 p. m. and all employment on any weekday in excess of

TABLE XIV. — *Minimum Weekly Wages and Overtime Rates for a Special Class of Boys in Wales.*

Class of Worker and District Wages Committee Area	Minimum weekly wages at various ages					Number of hours per week in respect of which minimum wage was payable		Overtime rates per hour at various ages							
	17-18	16-17	15-16	14-15	Under 14	Summer	Winter	17-18	16-17	15-16	14-15	Under 14			
Boys who were wholly or partially boarded by their employers and whose duties included attending to horses and other stock :	s. d.	s. d.	s. d.	s. d.	s. d.			Weekdays	Weekdays	Weekdays	Weekdays	Weekdays			
	30	0 25	0 23	0 19	0 15	Custom- ary	Custom- ary	7 8 1/2	5 1/2	6 1/4	5	6	4 1/2	3 1/2	
	30	0 24	0 21	0 17	0 12	61	58	7 8 1/2	5 1/2	6 1/4	5	6	4 1/2	3 1/2	
	33	6 28	0 22	6 17	6 11	56	53	9 10 1/2	7 1/2	9	6	7	4 1/2	3 1/2	
	35	0 28	0 22	6 17	6 11	56	53	9 1/2	11 1/2	7 1/2	9	6	7	4 1/2	3 1/2
	32	0 25	6 20	6 16	0 11	56	53	8 1/2	10 1/2	7	8 1/2	5 1/2	6 1/2	4 1/2	3 1/2
MERIONETH AND MONTGOMERY :															
In force on 30 December 1918															
In force on 6 October 1919															
In force on 31 May 1920 . . .															
In force on 1 March 1921 . . .															
In force on 5 September 1921															
BRECON AND RADNOR :															
In force from 10 February 1919 to 6 October 1919 . . .															
	30	0 25	0 23	0 19	0 15	Custom- ary	Custom- ary	7 8 1/2	5 1/2	6 1/4	5	6	4 1/2	3 1/2	

TABLE XV. — Minimum and Overtime Rates for Females Workers in force at Various Dates

District Wages Committee Areas	Minimum rates per hour at various ages					Overtime rates per hour at various ages											
	Over 18	17-18	16-17	15-16	14-15	Under 14	Over 18		17-18		16-17		15-16		14-15		Under 14
							Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	Weekdays	Sundays	
A. In force on 31 October 1918: Cumberland, Westmorland and Furness District of Lancashire, Yorkshire. All other parts of England and Wales	d.	d.	d ₂	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
	6	5½	5	4½	4	3½	7½	7	8	6	2½	5½	2	5	6	4½	5
	5	4½	4	3½	3	2½	6	5½	7	5	6	4½	3	4	4½	3	4
B. In force on 14 July 1919: Cumberland, Westmorland and Furness District of Lancashire, Yorkshire. All other parts of England and Wales	7	5½	5	4½	4	3½	9	7	8	6	2½	5½	7	5	6	4½	5
	6	4½	4	3½	3	2½	7½	5½	7	5	6	4½	5	4	4½	3	4
							9	7	8	6	2½	5½	7	5	6	4½	5
C. In force on 31 May 1920: Cumberland, Westmorland and Furness District of Lancashire, Yorkshire. All other parts of England and Wales	10	8	7	6½	5½	5	12½	10	12	9	10½	8	10	7	8	6	7½
	8	6	5½	5	4	3½	10	7½	8	7	8	6	7½	5	6	4	4½
	7	5½	5	4½	3½	2½	9	7½	7	6	7½	5½	7	4½	5	3	4
D. In force on 1 March 1922: Cumberland, Westmorland and Furness District of Lancashire, Yorkshire. All other parts of England and Wales	10	7	6	5	4	3	12½	10	12	9	10½	8	10	7	8	6	7½
	8	6	5½	5	4	3	10	7½	8	7	8	6	7½	5	6	4	4½
							9	7½	7	6	7½	5½	7	4½	5	3	4
E. In force on 5 September 1921: Cumberland, Westmorland and Furness District of Lancashire, Yorkshire. All other parts of England and Wales	8	6	5½	5	4	3½	10	7½	8	7	8	6	7½	5	6	4	4½
	7	5½	5	4½	3½	2½	9	7½	7	6	7½	5½	7	4½	5	3	4
							8	7	8	7	8	6	7½	5	6	4	4½

a specified number of hours. The number was 8 hours all the year round in most parts of England and Wales but in Cambridgeshire, Huntingdonshire and Bedfordshire, in Cumberland and Westmoreland, in Derbyshire, in Devonshire, in Dorset, in Hertfordshire and Middlesex, in Kent, in Northamptonshire, in Nottinghamshire and in Wiltshire, the number was 8 $\frac{1}{2}$ hours in Summer and 8 hours in Winter, while in Cheshire, in Lancashire, in Shropshire, in Glamorgan and Monmouth and in Merioneth and Montgomery, the number was 8 $\frac{1}{2}$ hours all the year round.

The Order which came into operation on 14 July 1919 only changed the minimum and overtime rates for female workers over 18 years of age. By this time the short day had been introduced and all employment in excess of 6 $\frac{1}{2}$ hours on the short day was reckoned as overtime. The subsequent Orders did not introduce any change into the system of calculating overtime.

Under all the Orders, the minimum and overtime rates were subject to a deduction of $\frac{1}{2}$ d. per hour during the first three months of a worker's employment in agriculture.

§ 10. CORN AND HAY HARVEST WAGES.

Corn Harvest of 1919. — In several District Wages Committee areas minimum rates of wages and special overtime rates were fixed for workers employed on the corn harvest in 1919.

In Cambridgeshire minimum weekly wages were fixed for a week of 60 hours (excluding Sundays). These were for male workers over 21 years of age, 73s.; 20 to 21 years, 70s.; 19 to 20 years, 68s.; 18 to 19 years, 66s.; 17 to 18 years, 52s.; 16 to 17 years, 44s.; 15 to 16 years, 36s.; 14 to 15 years, 28s.; under 14 years, 20s. For female workers the rates were: Over 18 years, 55s.; 17 to 18 years, 41s. 6d.; 16 to 17 years, 37s.; 15 to 16 years, 32s. 6d.; 14 to 15 years, 28s.; under 14 years, 23s.

Workers in regular employment on the farm who were employed on harvest work were to be paid at least 24 days at the special rates; for workers

TABLE XVI. — *Corn Harvest*

District Wages Committee Areas	Over 21	20-21	19-20	18-19	17
	d	d	d	d	s
Nottinghamshire	17	16	16	15 $\frac{1}{2}$	13
Lincolnshire	13 $\frac{1}{2}$	11 $\frac{1}{2}$	11 $\frac{1}{2}$	11	8
Oxfordshire	12	12	12	12	7
Dorset	10	10	10	10	7

engaged for the harvest period, the special rates only applied in respect of hours actually worked on the harvest.

In Yorkshire minimum weekly wages were also fixed for employment during the corn harvest. For male workers over 18 years the minimum weekly harvest wage was £4; for male workers under 18 years and for all female workers, it was 50 per cent. higher than the normal minimum weekly wage. Where the worker was employed for the whole of the harvest on a farm comprising more than 10 acres of corn, the special rates were to be paid for a period of four weeks from the day on which he was first employed on harvest work, even if he were not employed for the whole of this period in harvest work, and after the period had expired he was to be paid at the special rate in respect of each day upon which he was employed on such work. Where the worker was employed on a farm not comprising 10 acres of corn, or was employed for less than the whole period, the special rates were payable only in respect of the days on which he was actually employed on harvest work.

In Dorset, Lincolnshire, Nottinghamshire and Oxfordshire, minimum rates per hour were fixed for harvest work. These are set out in Table XVI.

Special overtime rates for harvest work were fixed in thirteen areas. These are shown in Table XVII (page 562). In all the areas except Cambridgeshire and Yorkshire, overtime employment included all employment on Sunday, all employment in excess of 6 $\frac{1}{2}$ hours on Saturday and all employment in excess of 9 $\frac{1}{2}$ hours on any other day.

In Dorset there was a special definition of overtime for stockmen, horsemen and shepherds employed on harvest work; it was all employment in excess of 6 $\frac{1}{2}$ hours on the short day except time spent on that day in connection with the feeding and cleaning of stock and all employment on any day in excess of the hours of employment customary in the area for workers of this class.

In Cambridgeshire overtime did not begin on days other than Sunday and the short day until 10 hours had been worked.

Minimum Rates per Hour.

Female workers								
15-16	14-15	Under 14	Over 18	17-18	16-17	15-16	14-15	Under 14
<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>	<i>d</i>
9	6 $\frac{1}{2}$	5	10	9	8	7	6	5
6	4 $\frac{1}{2}$	4	9	7	6	5	4 $\frac{1}{2}$	4
5	4	3	9	6	5 $\frac{1}{2}$	4 $\frac{1}{2}$	4	3
5	4	3	7 $\frac{1}{2}$	5 $\frac{1}{2}$	5	4 $\frac{1}{2}$	4	3

CONDITIONS OF THE AGRICULTURAL CLASSES - GREAT BRITAIN AND IRELAND

TABLE XVII. — Corn Harvest of 1919: Special Overtime Rates per Hour.

[illegible]

In Yorkshire special overtime rates were fixed for male workers over 18 years of age. To other workers the normal overtime rates applied. For all workers, however, overtime employment during the harvest period was defined as being all employment on Sundays and all employment on weekdays before 6.45 a. m. and after 8 p. m. or (when only cutting or stooking work was in progress) after 7 p. m.

In Suffolk another system was adopted. It was laid down that during the period of corn harvest no employment on harvest work on a weekday was to be treated as overtime employment, and every worker was to be paid ordinary wages, but was to be entitled to a bonus on the completion of the harvest. This bonus in the case of male workers, according to age, was: Over 21 years, £7 10s.; 20 to 21 years, £7 4s.; 19 to 20 years, £7; 18 to 19 years, £6 16s.; 17 to 18 years, £5 7s.; 16 to 17 years, £4 10s.; 15 to 16 years £3 14s.; 14 to 15 years, £2 17s. 6d.; under 14 years, £2. For female workers the bonus was: Over 18 years, £5 10s.; 17 to 18 years, £4 3s.; 16 to 17 years, £3 15s.; 15 to 16 years, £3 5s.; 14 to 15 years, £2 15s.; under 14 years, £2. A worker who had only worked a part of the harvest period was only entitled to a corresponding proportion of the bonus.

The hours to be worked during the harvest in Suffolk were to be, if required, not less than 12 hours on any weekday while the crops were being carted and not less than 11 hours on any weekday while other harvest work was in progress. All employment on harvest work on Sunday was paid for at the rates for Sunday work normally applicable to the worker.

Corn and Hay Harvest of 1920. — For the corn harvest of 1920, minimum weekly wages were fixed for male workers in Glamorgan and Monmouth, as follows: Over 21 years, 50s.; 20 to 21 years, 48s. 6d.; 19 to 20 years, 45s. 6d.; 18 to 19 years, 44s.; 17 to 18 years, 35s.; 16 to 17 years, 29s.; 15 to 16 years, 23 s. 6d.; 14 to 15 years, 18s.; under 14 years, 18s. These rates applied in respect of each week in which a worker was employed for at least two days or parts of two days on harvest work.

In Yorkshire the same minimum rates were in force as for the corn harvest of 1919.

In Derbyshire and in Nottinghamshire minimum rates per hour were fixed for harvest work for both male and female workers and in Glamorgan and Monmouth for female workers. These rates are shown in Table XVIII (pages 564-565).

Special overtime rates for harvest work were fixed in 14 District. Wages Committee areas. These rates are shown in Table XIX (page 566).

It will be seen that, except in Derbyshire, the same overtime rates were fixed for Sundays as for weekdays. In most areas overtime employment was defined as all employment on a Sunday, all employment in excess of 6 ½ hours on a Saturday, all employment in excess of 8 ¾ hours on any other day and all employment in excess of 50 hours in any week (excluding Sunday). In Cheshire, in Cumberland, Westmoreland and the Furness District of Lancashire, in Derbyshire, in Glamorgan and Monmouth

TABLE XVIII. — *Corn Harvest*

District Wages Committee Areas					
	Over 21	20-21	19-20	18-19	17
	d	d	d	d	d
Nottinghamshire	18	17	16 1/2	15 1/2	12
Derbyshire	15 1/2	14 1/2	14	13 1/2	10
Glamorgan and Monmouth . . . . .	...	...	...	...	...

and in Shropshire the ordinary definition of overtime employment was applicable. In Nottinghamshire no differential overtime rates were fixed for employment on harvest work.

In Suffolk the provisions which had been made in 1920 remained in force. The same provisions were applied in Essex to workers on farms containing more than 50 acres of corn; on a farm containing not more than 50 acres of corn, it was provided that during a period of four weeks from the commencement of the corn harvest on the farm no employment on a weekday (whether on harvest work or not) should be treated as overtime employment and that every worker (whether employed on harvest work or not) should be paid ordinary wages and be entitled to the same bonus, provided that he or she worked, if required, on every weekday 12 hours while the crops were being carted, and 11 hours while other work was in progress.

In Warwickshire and Shropshire special bonuses were fixed in respect of each day on which the worker was wholly or mainly employed on harvest work.

In Warwickshire, in the case of workers employed on a farm containing less than 100 acres of corn, for the first six days of the workers' employment on harvest and in the case of workers employed on a farm containing more than 100 acres for the first twelve days of the worker's employment on harvest, the bonuses were: Over 21 years, 2s. 6d.; 20 to 21 years, 2s. 6d.; 19 to 20 years, 2s. 3d.; 18 to 19 years, 2s. 3d.; 17 to 18 years, 1s. 9d.; 16 to 17 years, 1s. 6d.; 15 to 16 years, 1s. 3d.; 14 to 15 years, 1s.; under 14 years, 6d. For female workers the bonuses were: Over 18 years, 1s. 9d.; 17 to 18 years, 1s. 6d.; 16 to 17 years, 1s. 3d.; 15 to 16 years, 1s. 3d.; 14 to 15 years, 1s.; under 14 years, 6d. The same bonuses were payable on all farms in Shropshire to male and female workers in respect of each day on which they were employed on harvest work for five hours or more (exclusive of overtime employment) but only half the amount was payable in respect of each day on which they were employed on harvest work for less than five hours. On farms in Warwickshire containing less than 100 acres of corn for the

Minimum Rates per Hour.

			Female workers						
15-16	14-15	under 14	over 18	17-18	16-17	15-16	14-15	under 14	
d	d	d	d	d	d	d	d	d	
8 1/2	6 1/2	4 1/2	12 1/2	10	9	8	6 1/2	4 1/2	
7	5 1/2	3 1/2	10 1/2	8	7 1/2	7	5	4	
...	...	...	7 1/2	6	5 1/2	5	4	3

seventh and subsequent days of the workers' employment on harvest, and on farms containing more than 100 acres of corn for the thirteenth and subsequent days, the bonuses for male workers were: Over 21 years, 1s. 6d.; 20 to 21 years, 1s. 6d.; 19 to 20 years, 1s. 3d.; 18 to 19 years, 1s. 3d.; 17 to 18 years, 1s.; 16 to 17 years, 9d.; 15 to 16 years, 9d.; 14 to 15 years, 6d.; under 14 years, 3d. For female workers the bonuses were: Over 18 years, 1s.; 17 to 18 years, 9d.; 16 to 17 years, 9d.; 15 to 16 years, 9d.; 14 to 15 years, 6d.; under 14 years, 3d.

In Anglesey and Carnarvon, in Cheshire, in Cornwall, in Cumberland, Westmoreland and the Furness District of Lancashire, in Denbigh and Flint, in Derbyshire, in Gloucestershire, in Herefordshire, in Shropshire, in Somerset, in Surrey, in Warwickshire and in Wiltshire the same provisions applied to the hay harvest as to the corn harvest.

C. *Corn and Hay Harvest of 1921.* — For the corn harvest of 1921 the provisions made for the corn harvest of the previous year in Cornwall, in Cumberland, Westmoreland and the Furness District of Lancashire, in Denbigh and Flint, in Devonshire, in Glamorgan and Monmouth, in Herefordshire, in Somerset, in Suffolk, and in Surrey remained unchanged.

Including areas in which the provisions remained unchanged, special overtime rates were fixed in 15 areas. These are shown in Table XX (page 566).

In Glamorgan and Monmouth the ordinary definition of overtime was applicable to these rates. In all the other areas the definition of overtime was the same as that generally adopted for the corn harvest of 1920.

The minimum weekly wages which had been fixed for Glamorgan and Monmouth for male workers were the only minimum weekly wages which remained in force, those fixed for Yorkshire having been cancelled. The minimum rates per hour for female workers in Glamorgan and Monmouth also remained in force, and minimum rates per hour were fixed for both male and female workers in Essex in the case of farms containing not more than 40 acres of corn. These latter rates were: For male workers over 21 years, 1s. 4d.; 20 to 21 years, 1s. 3d.; 19 to 20 years,

TABLE XIX. — *Corn Harvest of 1920: Special Overtime Rates per Hour.*

District Wages Committee Areas	Male workers										Female workers					
	Over 21	20-21	19-20	18-19	17-18	16-17	15-16	14-15	Under 14	Over 18	17-18	16-17	15-16	14-15	Under 14	
Derbyshire (1): Sundays.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	
Weekdays.	31	29	28	27	21	18	14	11	7	21	16	15	14	10	8	
Gloucestershire.	26	24	23	22	18	15	12	9	6	18	14	12	11	9	6	
Surrey.	20 ¹ / ₂	19 ¹ / ₂	18 ¹ / ₂	18	14	11 ¹ / ₂	9 ¹ / ₂	7 ¹ / ₂	5	14	11	10	9	7	5	
Glamorgan and Monmouth (2).	18	17 ¹ / ₂	17	15 ¹ / ₂	12 ¹ / ₂	10 ¹ / ₂	8 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	13 ¹ / ₂	9 ¹ / ₂	8 ¹ / ₂	7 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	
Herefordshire.	18	17 ¹ / ₂	16 ¹ / ₂	16	12 ¹ / ₂	10 ¹ / ₂	8 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	11	9	8	7 ¹ / ₂	6	4 ¹ / ₂	
Cornwall, Devonshire.	18	17	16 ¹ / ₂	15 ¹ / ₂	12 ¹ / ₂	10 ¹ / ₂	8 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	13	10	9 ¹ / ₂	8 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	
Cumberland, Westmoreland and the Furness District of Lancashire.	18	17	16 ¹ / ₂	15 ¹ / ₂	12 ¹ / ₂	10 ¹ / ₂	8 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	12 ¹ / ₂	10	9	8	6 ¹ / ₂	4 ¹ / ₂	
Somerset.	17	16	16	16	12	12	9	9	4 ¹ / ₂	12	9	9	7 ¹ / ₂	7 ¹ / ₂	4 ¹ / ₂	
Anglesey and Carnarvon; Denbigh and Flint.	16	16	16	15 ¹ / ₂	11 ¹ / ₂	9 ¹ / ₂	8	6 ¹ / ₂	4 ¹ / ₂	13 ¹ / ₂	10	9 ¹ / ₂	8	6 ¹ / ₂	4 ¹ / ₂	
Shropshire (3).	16	15	16	16	13	10 ¹ / ₂	8 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	13	10	9 ¹ / ₂	8 ¹ / ₂	6 ¹ / ₂	4 ¹ / ₂	
Wiltshire.	15 ¹ / ₂	14 ¹ / ₂	14	14 ¹ / ₂	11	9	7 ¹ / ₂	5 ¹ / ₂	4	11	8 ¹ / ₂	8	7	5 ¹ / ₂	4	
Cheshire.			15 ¹ / ₂	14 ¹ / ₂	13 ¹ / ₂	10 ¹ / ₂	9	7	5 ¹ / ₂	4	10 ¹ / ₂	8	7 ¹ / ₂	7	5	

Sunday overtime rate in force at the time.

Sunday overtime rate in force at the time.

(1) For Derbyshire increased rates per hour were also fixed for employment other than overtime employment. — (2) For Glamorgan and Monmouth special minimum wages were also fixed. — (3) For Shropshire special bonuses were also fixed.

TABLE XX. — Corn Harvest of 1921: Special Overtime Rates per Hour.

District Wages Committee Areas	Male workers										Female workers					
	Over 21					Under 14					Over 14					Under 14
	20-21	19-20	18-19	17-18	16-17	15-16	14-15	Under 14	Over 14	17-18	16-17	15-16	14-15	Under 14	Over 14	Under 14
Yorkehire	24	22	20	15	12	10	8	5	20	14	12	10	8	6	6	6
Nottinghamshire	20	18½	17½	16½	13½	10½	8½	4½	14	11	10	9	7½	5½	5½	5½
Surrey	18	17½	17	15½	12½	10½	8½	4½	12	9½	8½	7½	6	4½	4½	4½
Gloucestershire and Monmouth (1)	18	17½	16½	16	12½	10½	8½	4½	11	9	8	7½	6	4½	4½	4½
Herefordshire	18	17	16½	15½	12½	10½	8½	4½	13	10	9½	8½	6½	4½	4½	4½
Cornwall; Devonshire	18	17	16½	15½	12½	10½	8½	4½	12½	10	9	8	6½	4½	4½	4½
Warwickshire	17½	16½	15½	14½	12	9½	7½	5½	4	12½	9½	8½	7½	6	5	5
Somerset	17	16	15½	15	11½	9½	8	6½	4½	13½	10	9½	8	6½	4½	4½
Derbyshire; Gloucestershire; Wiltshire	17	15½	15	14	11	9	7	5½	3½	12	9	8	7½	6	4½	4½
Denbigh and Flint	16	16	16	16	13	10½	8½	6½	4½	13	10	9½	8½	6½	4½	4½
Anglesey and Carnarvon; Merioneth and Montgomery	15	15	15	15	12	9½	7½	6	4½	12½	9½	9	7½	6	4½	4½

(1) For Glamorgan and Monmouth special minimum wages were also fixed.

1s. 2d.; 18 to 19 years, 1s. 1 ½d.; 17 to 18 years, 10 ½d.; 16 to 17 years, 8 ½d.; 15 to 16 years, 7d.; 14 to 15 years, 5d.; under 14 years, 3 ½d. For female workers over 18 years, 11 ½d.; 17 to 18 years, 8 ½d.; 16 to 17 years, 8d.; 15 to 16 years, 7d.; 14 to 15 years, 5 ½d.; under 14 years, 4d.

The sums payable in Suffolk on completion of harvest remained unchanged but in Essex a new scale of payments was fixed which was made applicable only to farms containing more than 40 acres of corn. The scale of payments was as follows: For male workers, over 21 years, £6 15s.; 20 to 21 years, £6 5s.; 19 to 20 years, £6; 18 to 19 years, £5 10s.; 17 to 18 years, £4 10s.; 16 to 17 years, £3 10s.; 15 to 16 years, £2 15s.; 14 to 15 years, £2 5s.; under 14 years, £1 10s. For female workers over 18 years, £4 15s.; 17 to 18 years, £3 10s.; 16 to 17 years, £3 5s.; 15 to 16 years, £2 15s.; 14 to 15 years, £2 5s.; under 14 years, £1 10s. The conditions were also varied slightly, it being provided that the employer should be entitled to require the worker to work not more than 24 weekdays of not more than 11 working hours each. On these days no employment up to 11 hours was to be reckoned as overtime employment, but all employment in excess of 11 hours per day was to be paid at the ordinary overtime rate. The full bonus was to be payable if the worker was employed on harvest work for 24 weekdays, but if he or she was employed for less than 24 days, the bonus was to be proportionately reduced.

The special overtime rates fixed for the corn harvest applied also to the hay harvest in the following areas: Anglesey and Carnarvon; Cornwall; Cumberland, Westmoreland and the Furness District of Lancashire; Denbigh and Flint; Devonshire; Derbyshire; Gloucestershire; Herefordshire; Merioneth and Montgomery; Somerset; Surrey; Wiltshire; Yorkshire.

§ II. THE ABOLITION OF THE AGRICULTURAL WAGES BOARD.

By an Act which received the Royal Assent on 19 August 1921 (1), the Corn Production Acts were repealed and the Agricultural Wages Board and District Wages Committees were thus abolished. A new system of fixing minimum wages was, however, introduced. It was proposed to set up local Joint Conciliation Committees representing the employers and workmen, and the Minister of Agriculture was empowered to take such steps as he thought best calculated to secure the voluntary formation and continuance of such committees. It was provided that for two years from the passing of the Act, or until a Joint Conciliation Committee was formed, the representatives of the employers and of the workers on any District Wages Committee should act as a Joint Conciliation Committee for any part of the area for which such a Committee did not exist.

(1) The Corn Production Acts (Repeal) Act, 1921.

When a Joint Conciliation Committee has agreed upon a rate of wages for any class of workers in the district (or any part of the district) for which it has been formed, it can submit the agreement to the Minister of Agriculture, who can confirm it and advertize it. If a rate of wages has been so agreed, confirmed and advertized, it becomes an implied term of every contract for the employment of a workman of any class to which the agreement applies that the employer shall pay the workman wages at not less than the rate agreed upon.

The representatives of the employers and workmen on a Joint Conciliation Committee have, respectively, one collective vote on any question, and the chairman is not to have the power to vote, except in respect of any particular matter in respect of which the Committee agrees that he shall have such power. Generally speaking, therefore, no resolution will be regarded as carried unless it has been approved by a majority both of the employers' representatives and of the workers' representatives.

J. K. M.

LAND SYSTEMS

MISCELLANEOUS INFORMATION RELATING TO LAND SYSTEMS

ARGENTINA.

A NEW AGRICULTURAL LETTING AGREEMENT. — *Crónica Mensual del Departamento Nacional del Trabajo*, No. 47. Buenos Aires, November, 1921.

By the Law No. 11,170, in date 7 October 1921, there are laid down the regulations which are to govern the agricultural letting agreements in Argentina, relating to an area of land not more than 300 hectares, situated outside the boundary of the communes and intended for the cultivation of cereals or stockbreeding, the payment being due in money or kind, or by delivery of some percentage of the crop.

Form and Limit of the Agreement. — The agreements as described above may be drawn up either by a public instrument or by a private document. To secure confirmation they must be deposited within eight days at the local office of Registration of Property for registration, or sent for that purpose to the magistrate who has jurisdiction in the locality where the land is situated.

When the registration is made within the limit of six days, the agreement is good against a third party from the date of the stipulation; in the case when it is registered after that limit, it will hold good against a third party only from the date of the registration. In the event of it having been brought into being without these formalities, while it is possible to prove its existence in accordance with common law, the agree-

ment is considered as existing in conformity with the law of which we are treating.

The agreements made according to these provisions, when they refer to land situated within the area of national jurisdiction are, during the first five years from the promulgation of the present law, exempt from the payment of tax and from any other duty.

The law lays down that no clauses inserted in the agreements in any contingency shall oblige the tenant to sell the produce to the owner or to any expressly mentioned person; or to insure the crops or the harvest with a special society or person, or in a special way; or to make use of a special machine for threshing, for reaping, spreading or carrying the grain, or to rely for that purpose on a particular firm or person; or finally to give up the rights and the guarantees of safety and protection which this law confers on the tenants.

If there is no fixed date for the termination of the agreement or if the period fixed is less than four years, the tenant has the option of considering the agreement as valid for four years, with the obligation of giving notice to the owner six months before the end of the agreement.

If he does not wish to avail himself of this privilege of the law, he must give notice that he waives it six months before the end of every year, doing so before the magistrate of the locality or in some other legal manner.

Sub-letting of Lands Leased. — The law forbids the transfer of the agreement or the sub-letting of the farm, at least without the express consent of the owner, in which case the period of the transfer or of the sub-let must not be less than four years except by written consent to that effect from the owner himself.

Powers Granted to the Tenant. — The tenant has the right to build a brick house consisting of two rooms and a kitchen, a shed, a barn, a silo for cereals and for fodder and a horse-trough; he may besides plant five fruit-trees and five forest trees for each hectare of land, up to 500 trees as a maximum. It is understood that he cannot exercise this right where he finds the improvements mentioned already in existence in the property he is about to occupy.

Compensation due from the Owner. — On the expiry of the period of the agreement, the tenant has to give up the farm, compensation being first paid in money by the owner; this is to be reckoned in proportion to the value of the improvements introduced into the farm, up to a maximum of 10 per cent. of the value which is attributed to the farm for the purposes of payment of the land-tax.

When the tenant and the owner are not in agreement in fixing the value of the said compensation, the law requires that the decision be referred to a special committee, constituted by a representative of the owner, a representative of the tenant and a third person, named by the parties or by the magistrate.

If at the expiry of the agreement the owner agrees to an extension of a fresh period of four years, the compensation for the improvements will be postponed till the end of the new agreement.

The tenant has no claim to any further limit of time for giving up the farm after the expiry of the agreement.

Obligations of the Tenant. — The tenant is under an obligation to devote the land to agricultural operations, in the sense of the letting agreement, and maintain and keep in good condition the enclosures and the improvements he has found on the farm, except for ordinary wear and tear.

As we have said, the rent can be paid by the delivery to the owner of a percentage of the crop. In this case the payment of the percentage must be made after the quantity of seed has been withdrawn that is required by the tenant, such tenant not to give up more than 5 per cent. of the area of the piece of land to pasturage or fruit growing.

Non-liability to Seizure of Implements, etc. — The following are declared not liable to seizure and cannot be distrained: furniture and everything essential to the maintenance and work of the agriculturist, such as domestic utensils, a plough, a seed drill, a reaper, a sulky with its accessories, a cart and harness for six horses, fifteen horses, or three pair of oxen with the necessary equipment for harnessing them to the plough, two milch cows with their calves, three pigs or other small live stock for the consumption of the family for a whole year, and finally the seed for the following season, but in no case in an amount exceeding what is wanted for the cultivation of the farm, up to a maximum of 80 hectares.

Breaking up of the Lands. — The provisions of this law do not deprive the owners of the power of dividing their land and selling portions, up to 300 hectares each, to buyers who buy them to work them themselves.

If sales of this kind are effected and the period of the letting agreement has expired, the owners can request and obtain the eviction of the occupiers under the terms of the common law, paying in that case the compensation mentioned above.

The non-fulfilment of any of the obligations of the tenant to the owner gives the owner the right to consider the agreement annulled, to demand the eviction of the tenant and the restoration of the land on the terms laid down by the civil code.

It may be noted that irrigated lands are not included among those which can be the object of a letting agreement on the lines laid down by the Law of 7 October 1921.

E. F.

ECUADOR.

GRANTS OF LAND FOR COLONIZATION. — *Registro Oficial*, No. 338. Year II. Quito, 28 October 1921.

By the Law dated 8 October 1921 power is given to the Government of the Republic of Ecuador to make colonization agreements in the eastern region, more particularly in the province of Napo-Pastaza.

On the basis of this law, the Government can grant the full possession of 10,000 hectares of uncultivated land to one or more persons, for the estab-

lishment of an agricultural colony consisting of at least 50 families, natives of Ecuador and Colombia.

To be available for such grants, land must be situated near to lines of communication.

So as further to facilitate the founding of the colonies, the Government binds itself for a period of ten years not to levy any duties, State, municipal or otherwise, on the raw materials and generally on all products, including manufactures, which the colonists may export or sell in the territory of the Republic, excluding tobacco and brandy.

In the event of the number of families in the colony being less than that required by the law, the grantee or grantees will pass back to the Government that proportion of the land which corresponds to the number of the families by which the total number falls short of the required number.

In like manner the quantity of land granted will be increased in the event of the number of families being greater than that required by the law.

The agreement will be declared void in the case when after the lapse of eighteen months the families have not established themselves in the place intended for the colony.

The law permits the contracting party or parties to transfer the agreement to others, the authorization of the Government having been obtained.

With the consent of the Government the transfer of the ownership is permitted alike to the contracting parties and their successors.

The law further lays down that the agreement must be ratified by a deed and registered at the Notarial office.

The advantages of the exemption from the above mentioned duties, conferred on the colonists by this law, are extended to all who actually possess lands in the eastern region indicated.

E. F.

FRANCE.

AN OFFICIAL EXPERIMENT IN HOME COLONIZATION (1). — *La Main-d'œuvre agricole*. Paris, March 1922.

On 6 February 1922 a third party of Breton cultivators, natives of Finistère and of the Côtes-du-Nord, proceeded to the South-west. This party was composed of 27 heads of families. At Bordeaux it was divided into two parties: one, including 20 heads of families, went to Périgueux; the other to Montauban.

A Breton expert had gone in advance of the party both into Dordogne and into Tarn-et-Garonne, with a mission from the Ministry of Agriculture to visit the farms reported vacant and to acquaint himself with their value for cultivation.

(1) See *International Review of Agricultural Economics*, November 1921, p. 609 and January-February 1922, p. 121.

At Périgueux a certain number of owners of the vacant farms had been assembled and met the new arrivals. Preliminary matters were entered into, and the parties concerned then went at once to see the proposed farms and to discuss terms. It had been agreed moreover that the leases should be drawn up and signed at the Directorate of Agricultural Administration, in the presence of the President of the Central Bureau of the Agricultural Co-operative Organizations of Finistère, Breton experts, the Director of Agricultural Administration and a representative of the Labour Department of the Ministry of Agriculture.

The object of these arrangements was to facilitate transactions, as the Bretons were not as a rule familiar with the provisions of leases on *métayage*.

At Montauban a certain number of owners had been summoned to the Prefecture in the same way. They met there a delegate of the Ministry of Agriculture, the Assistant Director of Agricultural Administration, and the Breton pioneers.

The distribution of the Bretons cultivators was very quickly effected. This contingent was smaller than had been at first reckoned, a certain number having fallen out at the moment of leaving Brittany. This falling off took place chiefly among the cultivators of the Côtes-du-Nord who do not yet know the South-west.

The same arrangements were made in Tarn-et-Garonne as in the Dordogne for the drawing up and signing of the leases.

All the Bretons of the party, that is 27 heads of families, signed the leases before their return to Brittany.

It may be noted that besides the Breton heads of families who have joined the various parties organized up to the present for Dordogne and Tarn-et-Garonne, a certain number of Bretons have entered into negotiations individually with landowners of these departments. The number of Breton families already installed in Dordogne is estimated at 120, and in Tarn-et-Garonne there are some twenty families settled or on the way to be settled.

The President of the Central Bureau of the Agricultural Co-operative Organizations of Finistère and the Breton pioneers made a point of enquiring into the circumstances of Bretons who had been settled for some time in the South-west. The impression they gained is excellent and gives promise of good results from the home colonization scheme which is being carried out.

We may add that apart from the Breton element, a large number of peasant families, natives of different regions, are endeavouring to settle in the South-west, a wide publicity having been given to the offers of vacant farms by the special lists published by the Ministry of Agriculture.

M. B.

GERMANY.

TEN YEARS' WORKING OF THE "EIGENE SCHOLLE" COLONIZATION SOCIETY.

— *Freie wissenschaftliche sozialistische Agrar-Korrespondenz*, No. 7-8. Berlin, 15 February, 1922.

In 1910 the Home Colonization Society "Eigene Scholle" was formed in Frankfort-on-Oder, as a limited liability company, with an initial capital of three and a half million marks. The Prussian Government took shares to the value of one million marks. At the end of the second year of working the capital of the company reached 8,300,000 marks in round figures. But this sum after ten years' working has not increased beyond 8,563,000 marks.

The chief aim of the society was the stemming of the rural exodus, continually becoming more and more serious.

Up to the time of the outbreak of war, the society had acquired 22,800 hectares of land, and had settled on them 904 families numbering in all 4,151 persons. These 904 families were placed as follows:

371 on holdings for labourers, from 0.125 to 1.5 hectares.

169 on holdings for artisans, from 1.5 to 5 hectares.

86 on small farms, from 5 to 10 hectares.

227 on farms of more than 10 hectares.

For 51 farms particulars are not available as to size.

The War completely blocked the activity of this colonization society and has rendered virtually impossible the creation of small holdings, on account of the immense increase in the prices of farm stock, whether live or dead. Equally the attempts to make arrangements for the disabled and for families of refugees led to no result by reason of the constant rise in wages and prices.

In the ten years of its working the Society acquired altogether 27,236 hectares of land, in round numbers, of which 15,945 hectares of cultivable land has been taken up for colonization, forming 1,769 peasant, artisan and labourers' holdings, and 483 workmen's holdings on the outskirts of the towns; 4,780 hectares of woodland, of water and of uncultivated land suitable for silviculture were handed over to the Crown forest lands, and 2,889 hectares (five farms) were resold: the remainder, 3,610 hectares, is still available and will be utilized for the formation of small agricultural holdings.

M. T.

LATVIA.

THE APPLICATION OF THE AGRARIAN REFORM. — *Recueil Mensuel du Bureau centrale statistique de l'Estonie*, Nos. 3 and 4. Tallinn, 1922.

The Latvian law on agrarian reform orders the formation of a reserve of State lands, including, firstly, the public lands and State forests and, secondly, all other cultivated lands except that part which must be left to the owner, this being of the extent of a medium-sized agricultural holding. It is out of this reserve that the new holdings are formed.

From 1919 to 1921 the number of properties divided up was

1,106. The number of holdings created was 27,386 which may be thus classified:

	Number	Area
Holdings not exceeding 2 hectares	1,059	1,333.92
» of between 2 and 5 hectares.	905	2,539.50
» » » 5 » 10 »	921	7,314.42
» » » 10 » 15 »	4,733	62,267.23
» » » 15 » 22 »	16,260	303,222.26
» » more than 22 »	3,508	87,247.48
Total	27,386	461,924.81

Besides this distribution, 42,957 hectares have been added to 1,120 existing agricultural holdings held on lease ; 72,238 hectares have been divided up to form 5,887 farms for various purposes, and there remain of the State reserve 2,291 properties, comprising 392,912 hectares.

M. B.

ALFREDO RUGGERI, *gerente responsabile.*

